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## U. S. ARMY CORPS OF ENGINEERS

## SUMMARY OF COMMODITY HANDLING TERMINALS ON UNITED STATES INLAND WATERWAYS



PREPARED BY

JOHN W. VETTER

PORT FACILITIES

NAVIGATION DATA CENTER WATER RESOURCES SUPPORT CENTER FORT BELVOIR, VIRGINIA 22060-5586

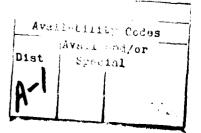
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## SUMMARY OF COMMODITY HANDLING TERMINALS ON UNITED STATES INLAND WATERWAYS

#### SCOPE:

This report groups the nations various inland waterway terminals by location and type of commodity handled. Included is general information denoting location, berthing length, indication of whether a terminal is a receiving, shipping, or inactive facility, operating rates, and storage capacities. Information indicating throughput capacities of individual terminals is not available.

#### **SELECTED WATERWAYS:**

The waterways included in this report are those designated as subject to the inland waterways users' tax as defined within the scope of PL 95-502 - October 21, 1978 and PL 99-662 - October 17, 1986. Specific information is not readily available for a number of the waterways, therefore, these segments are not included. Data is available for tributary areas of various defined waterways, however, these areas are not included in this report as the law does not specifically provide for them.

The following tabulation describes the various waterways subject to the users' tax, gives excluded waterways and tributary areas, and indicates the specific Port Series Report/s covering each waterway.

1. Alabama - Coosa Rivers - Alabama River from junction with Tombigbee River (mile 0) to junction with Coosa River (mile 314.0).

There are no commercial facilities on the Alabama River above mile 296. Port Series No. 64 documents 25 facilities below this point.

2. <u>Allegheny River</u> - from confluence with Monongahela River (mile 0) to head of navigation at East Brady, Pennsyslvania (mile 72).

There are no active commercial facilities above mile 50. Port Series No. 60 documents 41 facilities below this point.

3. Apalachicola-Chattahoochee-Flint Rivers - Apalachicola River from Gulf Intracoastal Waterway (mile 0) to junction with Chattahoochee and Flint Rivers (mile 107.8) and the latter two rivers from this point (mile 0) to Columbus, Georgia on the Chattahoochee River (mile 155) and to Bainbridge, Georgia on the Flint River (mile 28).

A total of 24 port facilities are described in Port Series No. 19 for the reaches indicated.

4. Arkansas River (McClellan-Kerr Arkansas River Navigation System - Essentially the Arkansas and Verdigris Rivers from the Mississippi River (mile 0) to Catoosa, Oklahoma (mile 448.2).

Specifically excluded from this report are 18 facilities not physically located on the waterway: 13 on Lake Langhofer (Pine Bluff Harbor); 3 on Poteau River at Fort Smith; and 2 on San Bois Creek at Keota, Oklahoma. A total of 71 port facilities for the waterway and tributaries are included in Port Series Report No. 68.

5. Atchafalaya River - from junction with Gulf Intracoastal Waterway (mile 0) to junction with Red River (mile 116.8).

Presently, the entire river is not covered by any Port Series Report although Port Series No. 68 identifies a grain facility near the northerly end and a multi-purpose pier on a non-included tributary area known as "Lower Old River". It is known that sand, grain, petroleum handling, and multi-purpose facilities exist at Knotz Springs (mile 48) and that the southerly portion near Morgan City has a number of facilities of which practically all are engaged in servicing the offshore oil industry.

6. <u>Atlantic Intracoastal Waterway</u> - between Norfolk, Virginia (mile 0), and Miami, Florida (mile 1089), main route via Albemarle and Chesapeake Canal, and alternate route, via Great Dismal Swamp Canal and Okeechobee Waterway.

Commercial traffic on the waterway is relatively rare; less than 500,000 tons of cargo was reported in 1986 for the entire waterway. A few facilities being located adjacent to a deepwater port may be included in a Port Series Report, however, a complete listing of commercial facilities on the waterway is not available.

7. <u>Black Warrier-Tombigbee-Mobile Rivers (Black Warrior River System)</u> - Mobile River from Chickasaw Creek at Mobile (mile 2.9) to junction with Tombigbee River (mile 45); Tombigbee River to junction with Black Warrior River at Demopolis (mile 215.4); Black Warrior River to head of Navigation at Port Birmingham on Locust Fork (mile 407.8); and on Mulberry Fork to junction with Sipsey Fork (mile 429.6) including 0.9 mile of Sipsey Fork.

A total of 68 port facilities are described in Port Series No. 64 for the waterway system. Two facilities on the Tensaw River, a tributary stream, are not included in this report.

8. <u>Columbia River (Columbia-Snake Rivers Inland Waterways)</u>: - The Columbia River from the Dalles Lock and Dam (mile 191.5) to Pasco, Washington (mile 330) and the Snake River from Pasco (mile 0) to Johnson Bar Landing, Idaho (mile 231.5).

The Snake River is not navigable for commercial craft above Lewiston, Idaho (mile 140). The port facilities at Lewiston, although physically located on the Clearwater River, are included in the report. Approximately 70 barge handling port facilities located on the Columbia River and tributaries below the Dalles Lock and Dam (mile 191.5) are excluded from the report as being outside the defined waterway. Port Series Report No. 33 documents 49 terminals along the waterway within the section defined.

9. <u>Cumberland River</u> - from the Ohio River (mile 0) to Cordell Hull Lock and Dam (mile 313.5).

Port Series Report No. 63 describes 34 facilities on the Cumberland River, 33 of which are located below mile 245. One wharf, however, is included although located at mile 359.

10. Green and Barren Rivers - Green River from Ohio River (mile 0) to mouth of Barren River (mile 149.1).

There are no commercial facilities above Rochester, Kentucky (mile 108). Port Series Report No. 63 describes 22 facilities below this point and they are included in this report.

11. Gulf Intracoastal Waterway - Inland Water Route paralleling the Gulf of Mexico shoreline from St. Marks River, Florida (mile 376.2E) to Brownsville, Texas (mile 681.8W).

Port facility descriptions for the waterway are not complete. Portions of the waterway containing commodity handling terminals are described in Port Series Reports Nos 19, 22, and 26, however, due to the incompleteness of available facility data, inclusion of the waterway has been postponed until publication of a future report.

12. <u>Illinois Waterway</u> - Illinois River from Mississippi River (mile 0) to junction with Des Plaines and Kankakee Rivers (mile 273); Des Plaines River to Lockport Lock (mile 291.1). The Chicago Sanitary and Ship Canal from Lockport to the South Branch Chicago River (mile 321.8) continuing up the North Branch Chicago River to mile 331, and along the main stem of the river from mile 325.5 to Lake Michigan (mile 327.5). The Calumet-Sag Channel from the Chicago Sanitary and Ship Canal (mile 303.5) to the Calumet River (mile 319.8); and the Calumet River from that point to Lake Michigan (mile 334).

Port Series Report No. 65 describes all the port facilities located below the Lockport Lock and Port Series Report No. 46 describes the remainder. For the purpose of this report, only barge handling facilities at the deep draft (Port of Chicago) wharves were considered.

13. <u>Kanawha River</u> - from the Ohio River (mile 0) to Deepwater, West Virginia (mile 90.6).

Seventy-eight facilities on the river are described in Port Series Report No. 61 and are included in this report. Five facilities on the Elk River at Charleston and one on the Poca River are excluded from the report as they are not located on the Kanawha River as defined by PL 95-502.

14. Kaskaskia River - from Mississippi River (mile 0) to Fayetteville, Illinois (mile 36.2).

One facility located at mile 24 is described in Port Series No. 70 for the river. Two additional terminals reportedly have been built since publication of the Port Series. All data available for the 3 terminals is included in the report.

15. <u>Kentucky River</u> - from Ohio River (mile 0) to junction of Middle and North Forks (mile 258.8).

Port Series Report No. 62 documents five commercial facilities on the river, of which only two are active: one at Frankfort (mile 65) and one at Carrollton near the mouth.

#### 16. Mississippi River

a. <u>Lower Mississipi River</u> - From Baton Rouge, Louisiana (mile 233.8) to the mouth of the Ohio River at Cairo, Illinois (mile 953.8).

Specifically excluded from this report are facilities that are not physically located on the Mississippi River: 30 at Vicksburg including Yazoo River Diversion Canal; 5 on Lake Providence; 27 on Lake Ferguson (Greenville Harbor); 3 at Rosedale Harbor; 37 on McKellar

Lake (Memphis Harbor); 11 on Wolf River at Memphis. A total of 229 port facilities for the waterways and tributaries are described in Port Series Reports Nos. 71 and 72.

b. Middle Mississippi River - from mouth of Ohio River at Cairo, Illinois (mile 0) to mouth of the Missouri River above St. Louis (mile 195.4).

Port Series Report No. 70 documents 130 facilities along the described waterway. Terminals along the Chain of Rocks Canal are included since the canal forms part of the river navigation route.

c. <u>Upper Mississippi River</u> - from mouth of Missouri River (mile 195.4) to Minneapolis, Minnesota (mile 857.6).

Specifically excluded from this report are facilities not physically located on the Mississippi River: 10 on Black River at LaCrosse, Wisconsin; 3 on St. Croix River at Stillwater, Minnesota; and 11 on Minnesota River at Savage, Minnesota. A total of 290 port facilities are described for the river and tributaries in Port Series Reports Nos. 70 and 69.

17. <u>Missouri River</u> - from junction with Mississippi River (mile 0) to Sioux City, Iowa (mile 734.8).

One hundred and six port facilities as documented in Port Series Report No. 68 are described as being physically located on the Missouri River. Two facilities located on tributaries (the Osage and Grand Rivers) are excluded from this report.

18. Monongahela River - from Ohio River at Pittsburgh (mile 0) to junction of Tygart and West Fork Rivers at Fairmont, West Virginia (mile 128.7).

Port Series Report No. 60 documents 146 port facilities along the Monongahela River and 2 on the Cheat River, an excluded tributary.

19. Ohio River - from Mississippi River at Cairo, Illinois (mile 981.5) to the confluence of the Allegheny and Monongahela Rivers at Pittsburgh (mile 0).

Specifically excluded from this report are facilities on tributary waters: Licking River; 13 on Big Sandy River; and 2 on Little Kanawha River. A total of 548 port facilities are physically located on the Ohio River and each is documented in Port Series Report Nos. 63, 62, 61, or 60, as well as those located on the excluded waterways.

20. <u>Ouachita-Black Rivers</u> - Black River from its junction with the Red River (mile 0) to its junction with the Ouachita River at Jonesville, Louisiana (mile 41.1) and the Ouachita River to the head of navigation at Camden, Arkansas (mile 331).

Port Series Report No. 68 describes 16 wharf facilities for the rivers, only 3 of which are more than minimally active in commodity handling.

21. Pearl River - from junction of West Pearl River with The Rigolets (mile 0) to Bogalusa, Louisiana (mile 58).

Port Series Report No. 19 describes 6 facilities on Port Bienville Industrial Canal, a tributary waterway. The only terminal situated on the river is a National Aeronautics and Space Administration Slip located near Gainesville, Louisiana (mile 14).

22. Red River - Red River and Lower Old River Channel from Mississippi River at Old River Control Structure (mile 0) to Cypress Bayou at Shreveport, Louisiana (mile 236).

One facility on the Old River is documented in Port Series Report No. 68. No other commodity handling terminals are located on the Red River.

23. <u>Tennessee River</u> - from junction with Ohio River at Faducah, Kentucky (mile 0) to the confluence of the Holston and French Broad Rivers east of Knoxville, Tennessee (mile 652.3).

Specifically excluded from this report are facilities located on tributary waters: 19 at Guntersville Harbor (Big Spring Creek and Polecat Branch); 6 on Hiwassee River at Charleston, Tennessee; 3 on Emory River at Harriman, Tennessee; 4 on Clinch River between Kingston and Clinton, Tennessee; 2 on French Broad River east of Knoxville, Tennessee and one each on the Elk River, Soddy Creek, Piney Creek/Wolf Creek Waterway, Kings Creek, and Little Tennessee River. Ports Series Report No. 64 documents 154 facilities on the Tennessee River and 34 on the tributaries, approximately two-thirds of which can be considered as active commodity handling terminals.

24. <u>Tennessee-Tombigbee Waterway</u> - from the Tennessee River at Yellow Creek (mile 450.7) to the junction of the Tombigbee and Black Warrior Rivers at Demopolis, Alabama (mile 217).

Port Series Report No. 64 documents 20 port facilities along the waterway, 19 of which handle commodities.

25. White River - from the Arkansas Post Canal (mile 9.8) to Newport, Arkansas (mile 255).

Port Series Report No. 68 documents 13 facilities for the river 12 of which are commodity handling terminals. All are included in this report.

26. Willamette River - from Portland, Oregon (mile 21) to Harrisburg, Oregon (mile 194).

Port Series Report No. 34 includes one facility above mile 21; another wharf located near mile 39 is not included in the Port Series. Above that point the only commercial activity amounts to handling log rafts. The Willamette River is not included in this report.

#### **COMMODITIES**:

Five commodity types, those represented by the majority of inland waterway commerce, have been selected viz: grain, coal, petroleum, dry bulk materials other than coal, and liquid bulk materials other than petroleum. The data presented is taken from the Corps of Engineers Port Series Reports. The heading "Ref. No." indicates an individual facility designation in one of the 14 Port Series Reports used. The specific report used for a waterway segment is given with the defined waterway tabulation beginning on page 1. The complete list of the 14 Port Series Report covering the inland waterway system (revised 1982-1987) is given in the bibliography on page 12.



# GRAIN HANDLING TERMINALS

Transfer rates between barge and truck or rail are given when available, facilities are arranged according to on-site storage capacity. Mode of service to elevator (rail or truck) is indicated and in some cases the size of barge holding areas at or near the terminal is given.

Facilities are subdivided into two categories, generally based upon size of storage capacity. Major Facilities generally are those having greater than 500,000 bushel storage capacity and rapid loading rates, however, this may vary slightly depending upon relativity on a particular waterway. Minor Facilities generally are those having less than 500,000 bushel on site storage capacity and/or have only a cyclical operation. The sizes of the barge holding areas shown may be mutually inclusive.

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

MATERMAY: ALABAMA RIVER

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck		Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
			MAJ	OR FACILITIES			
114	650	7,000			594,000		R/T
Ave.	650	7,000		<del> </del>	594,000		
Tot.	650				594,000		
			MIN	OR FACILITIES			
99	300	6,600			427,600		T
109	325	7,000			302,000		Ť
Ave.	313	6,800			364,800		
Tot.	625	-			729,600		
			<u>A</u> L	L FACILITIES			
Ave.	425	6,867			441,200		
Tot.	1,275				1,323,600		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

#### WATERWAY: APALACHICOLA, CHATTAHOOCHEE AND FLINT RIVERS

Ref. No.	Berth Length	Loading : (Bu/Hr To Barge Storage	) from		Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
				MIN	OR FACILITIES			
18	516	10,000				572,000		R, T
4	300	6,000				550,000		Ť
23	586	10,000				426,000	6	R, T
10	900		2,000			·		T
Ave.	576	8,637	2,000			516,000		
Tot.	2,302					1,348,000		
				AL	L FACILITIES			
Ave.	576	8,667	2,000			516,000		
Tot.	2,302					1,548,000		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (McCLELLAN-KERR - ARKANSAS RIVER NAVIGATION SYSTEM)

	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck		(Bu/Hr)	ge to	Flat & Elev.		Elev. Svc. (R/T)
			MAJO	R FACILITI	ES			
94 31 18 82 73 61 38 50 15 48 33 78	195 400 320 320 240 275 200 640 680 290 830 150 540		10,000	1,200 6,000 3,500	5,000	4,998,000 4,200,000 2,033,000 1,000,000 1,000,000 850,000 800,000 650,000 592,000	6	R/T TTTTTR/T R/T R/T R/T
Ave. Tot.	391 5,080	14,150 13,667	12,500	3,567	5,000	1,662,300 16,623,000		
			MINOF	R FACILITI	<b>E</b> S			
84 59 90 91	400 380 190 400	25,000 12,000 12,000				<b>4</b> 00,000 <b>4</b> ,000		T T T
Ave.	343	25,000 12,000				202,000		
Tot.	1,370					404,000		
			ALI	FACILITI	ES			
Ave.	379	15,136 13,000	12,500	3,567	5,000	1,418,917		
Tot.	6,450					17,027,000		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: BLACK WARRIOR-TOMBIGBEE-MOBILE RIVERS (BLACK WARRIOR RIVER SYSTEM)

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
			MAJOR	FACILITIES			
53	600	10,000			572,150	4	T
Ave.	600	10,000			572,150	<del></del>	
Tot.	600				572,150		
			MINOR	<b>FACILITIES</b>			
23	498	10,000			362,300		R, T
Ave.	498	10,000			362,300	<del></del>	
Tot.	498				362,300		
			<u> </u>	L FACILITIES			
Ave.	549	10,000			467,225		
Tot.	1,098				934,450		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: COLUMBIA-SNAKE RIVER SYSTEM

		Loading Rate		Unloading Rate	Total Storage	Total	Elev.
Ref.	Berth	(Bu/Hr)		(Bu/Hr)	Capacity (Bu)	Outside	Svc.
No.	Length	To Barge from		From Barge to	Flat & Elev.	Storage	(R/T)
		Storage Truck	Rail	From Barge to Storage Tr/Rail		(bushels)	
			MAJ	OR FACILITIES			
153	350	30,000				3,000,000	T
121	500	20,000			5,200,000	250,000	R, T
146	295	30,000			4,100,000		T
115	200	25,000			3,305,000		T
113	500	18,000			3,000,000		R, T
129	400	15,000			2,600,000		R, T
137	300	25,000			2,400,000	1,000,000	T
138	500	25,000			2,146,000		T
104	255	12,000			1,785,000		T
111	300	10,000			1,649,000	2,750,000	T
140	350	15,000			1,500,000		T
139	200	17,000			1,480,000	4,000,000	T
116	200	20,000			1,244,000	3,000,000	T
136	300	16,000				3,100,000	T
106	280	17,000			1,027,000	,	R, T
110	250	30,000			800,000		Ť
105	180	10,000			750,000		T
128	550	28,000			665,000	665,000	T
149	300	30,000			580,000	000,000	Ŧ
152	350	30,000			500,000	500,000	R, T
							·
Ave.	328	21,150			2,059,360		
Tot.	6,560				41,187,200	18,265,000	
			MIM	OR FACILITIES			
134	210	25,000			490,000	2,300,000	T
124	228	15,000			450,000	_,500,000	R, T
141	204	38,000			357,000	350,000	T.
135	300	30,000			320,000	330,000	Ť
133	300	30,000			320,000		•
Ave.	236	27,000			404,250	<del></del>	<del></del>
Tot.	942				1,617,000	2,650,000	
			AL	L FACILITIES			
Ave.	313	22,125			1,783,508		
Tot.	7,502				42,804,200		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: CUMBERLAND RIVER

Ref.	Berth Length	To Barge from	Unloading Rat (Bu/Hr) From Barge to Rail Storage Tr/Ra	Capacity (Bu) Flat & Elev.	Fleet Svc.
			MAJOR FACILITIES		
47 46		15,000 15,000 6,000		1,000,000 450,000	T T
Ave.	985	10,500 15,000		725,000	
Tot.	1,970			1,450,000	
			MINOR FACILITIES		
45	800	15,000		54,000	T
Ave.	800	15,000		54,000	
Tot.	800			54,000	
			ALL FACILITIES		
Ave.	923	12,000 15,000		501,333	
Tot.	2,770			1,504,000	

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: GREEN RIVER

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Unloading Rate Total Storage Holding (Bu/Hr) Capacity (Bu) Fleet From Barge to Flat & Elev. @ Rail Storage Tr/Rail Dock Near	(R/T)
			MAJOR FACILITIES	
72	900	20,000	2,690,000	R, T
Ave .	900	20,000	2,690,000	
Tot.	900		2,690,000	
		*****	MINOR FACILITIES	
69	350	32,500 32,500	70,000	T
Ave.	350	32,500 32,500	70,000	
Tot.	350		70,000	
			ALL FACILITIES	
Ave.	625	26,250 32,500	1,380,000	
Tot.	1,250		2,760,000	

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: ILLINOIS WATERWAY, (INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO)

Ref. No.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	;	Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Holdin Fleet @ Dock N		Elev. Svc. (R/T)		
			MINOR	FACILITIES						
100	800	10,000			370,000			R, T		
28		20,000			360,000		170	R, T		
147		8,500			315,000			T		
6		20,000			300,000		350	T		
89	195	20,000			270 000		97	Ť		
93		14,000			250,000		100	T		
20	500	20,000			225,000		130	T		
41	415	20,000			200,000		55	T		
91	400	15,000			200,000		97	T		
123	310	15,000			198,900		55	T		
39	435	21,000			190,000		55	T		
13	300	18,000			180,000		110	T		
12	400	15,000			132,000		110	T		
120	670	22,000			120,000		55	T		
18	700	22,000			115,000		130	T		
77	365	12,000			115,000		33			
88	400	20,000			110,000		97			
45	250	25,000			110,000		190	T		
116	280	15,000			100,000		118	T		
51	200	23,000			100,000		67	T		
115	200	35,000			100,000		118	T		
25	460	18,000			84,000		170	R, T		
107	300	•	40,000		80,000	12		R, T		
131	800	18,000			60,000		30	T		
104	580	18,000 14,000			60,000		67	T		
122	320	10,000			50,000		55	T		
37	1,400	20,000			42,000		130	R, T		
54	1,755	50,000	26 000				100	T		
92	875		36,000				100	-		
103 109	400	12,000				12	67	-		
56	400 400	14,000 10,000					100			
112	1,400	10,000	18,000				100	-		
Ave.	541	18,250 25,143	31,333		164,330	<del></del>				
Tot.	17,850				4,436,900					
	ALL FACILITIES									
Ave.	602	23,670 30,667	27,250	18,200	1,382,957					
mc+	22 700				•					
TOT.	33,739				67,764,900					

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: KASKASKIA RIVER

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Elev. Svc. (R/T)
			MINO	OR FACILITIES		
0	195	9,000		<del></del>	265,000	T
Ave.	195	9,000			265,000	 
Tot.	195				265,000	
			ALI	L FACILITIES		 
Ave.	195	9,000			265,000	
Tot.	195				265,000	

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Unloading Rate (Bu/Hr) From Barge to Rail Storage Tr/Ra	Capacity (Bu) Flat & Elev.	Holding Elev. Fleet Svc. @ (R/T) Dock Near
			MAJOR FACILITIES		
124	730	1,800		7,000,000	R/T
51	450	10,000	10,000	6,000,000	R/T
111	540	5,000	10,000	5,000,000	R/T
75	176	15,000	21,000	4,800,000	R/T
21	600	8,000		4,800,000	R/T
20	415	15,000	6,000	3,600,000	T
104	500	40,000		3,120,000	T
112	650	25,000		2,800,000	T
93	540	18,000		2,700,000	T
20	250	17,000	9,000	2,500,000	R/T
91	470	10,000	6,000	2,315,000	R/T
60	590	30,000		2,100,000	T
101	666	15,000		2,000,000	Ť
59	530	15,000		1,846,000	<b>T</b>
69	180	9,000		1,750,000	R/T
47	225	25,000	<b>7</b> 000	1,600,000	R/T
14	240	30,000	7,000	1,500,000	Ţ
63	350	12,000	5,500	1,400,000	T
32 100	240	8,000	11,000	1,325,000	R/T
3	170 5 <b>4</b> 0	15,000		1,300,000	T
55	420	15,000 13,500 15,000		1,285,000	T
101	100	10,000		1,208,000 1,200,000	T
57	250	15,000	5,000	1,200,000	Ť
65	380	15,000	5,000	1,040,000	Ť
66	650	12,000		1,000,000	Ť
34	195	10,000		1,000,000	R/T
85	360	18,000		935,000	T
97	425	20,000		900,000	Ţ
58	200	15,000		900,000	Ţ
26	190	10,000	4,000	750,000	Ţ
50	200	50,000	-,	750,000	R/T
64	540	15,000		750,000	T
19	185	20,000		590,000	Ŧ
66	300	10,000		560,000	Ŧ
56	260	35,000		550,000	T
80	250	18,000		544,000	T
Ave.	377	16,941 13,500	21,000 7,350	2,016,703	
Tot.	13,957			74,618,000	

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

#### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

	Berth Length	Loading (Bu/Hr To Barge Storage	from Truck			Capacity (Bu)	Elev. Svc. (R/T)
				MINOR	<b>FACILITIES</b>		
68	195	4,000				780,000	T
87	460	18,000				740,000	T
120	240	6,500				720,000	R/T
95	360	10,000				490,000	T
103	265	20,000				386,000	T
106	290	10,000				320,000	Ŧ
61	195	22,000				280,000	T
35	130	,			1,000	250,000	R/T
58	180	15,000			_,	200,000	T
57	250	15,000				127,000	T
49	142	40,000	3,000			110,000	R/T
117	300	7,000	-,			110,000	R
29	250	1,670				61,000	R/T
109	540	11,000				50,000	T
95	780	15,000				· · ·	T
118	358	5,250					T
116	314	0,	20,000				T
Ave.	309	11,459	11,500	<del></del>	1,000	330,286	 
Tot.	5,249					4,624,000	

Ave.	356	15,436 12,167 21,000	6,773	1,553,765
Tot. 19	9,206			79,242,000

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO TO MISSOURI RIVER)

Ref.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck		Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
			MAJOR	FACILITIES			
19	700	20,000			5,000,000		R/T
125	1,400	18,000			4,000,000		R/T
26	900	30,000	4,500		2,500,000		R/T
85	1,850	27,000	1,000	5,000	2,235,000		R/T
168	345	10,000		•/•••	1,500,000		T
6	175	12,000			1,100,000		R/T
Ave.	895	19,500	4,500	5,000	2,722,500		
Tot.	5,370				16,335,000		
			MINOR	FACILITIES .			
169	370	7,000			963,000		T
9	200	8,000			580,000		Ī
1	175	5,500			574,000		Ť
163	250	6,200			450,000		Ŧ
170	315	15,000			146,000		T
22	1,000	25,000					T
88	875		6,000				R
Ave.	455	11,117	6,000		542,600		
Tot.	3,185				2,713,000		
			AL	L FACILITIES			
Ave.	658	15,308	5,250	5,000	1,731,636		
Tot.	8,555				19,048,000		

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

Ref. No.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Total Storage Capacity (Bu) Flat & Elev.	Holding Fleet @ Dock Near	Elev. Svc. (R/T)
			MAJOR I	FACILITIES			
79	570	24,000			5,300,000		R/T
22	400	25,000			5,000,000		R/T
101	650	15,000			5,000,000		R/T
9	260	20,000			2,800,000		T
66	1,000	10,000			2,500,000		R/T
241	180	10,000			2,500,000		T T
1	600	20,000			2,300,000		Ť
86	400	25,000			2,000,000		R/T
141	3,500	25,000			2,000,000		T/R
7	600	19,000			1,850,000		T
58	390	17,000		18,000	1,800,000		R/T
13	1,000	25,000			1,590,000		T
75	585	18,000			1,465,000		R/T
158	780	30,000			1,250,000		R/T
216	950	28,000	20,000		1,232,000		R/T
245	525	25,000	•		1,200,000		T
213	750	16,000			1,100,000		R/T
251	420	9,500			1,000,000		R/T
228	500	15,000			1,000,000		R/T
223	1,000	28,000			860,000		T
209	430	25,000			850,000		R/T
202	590	40,000			750,000		R/T
8	400	32,500			723,000		T
143	300	25,000			650,000		R/T
38	400	35,000			650,000		T
23	1,200	40,000			535,000		R/T
60	750		7,000				R
Ave.	709	23,154	13,500	18,000	1,842,500		
Tot.	19,130				47,905,000		

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	
				~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
			MINOR	FACILITIES .		
14	300	5,000			510,000	T
225	400	22,000			412,000	T
15	1,365	27,500			350,000	T
149	300	30,000			350,000	T
204	1,500	25,000			350,000	R/T
27	600	60,000			324,000	R/T
147	400	35,000			300,000	R/T
96	400	20,000 20,000	40,000		300,000	R/T
159	780	20,000			300,000	T
167	900	25,000			300,000	R/T
12	525	18,000			280,000	T
181	650	22,000			250,000	T
62	932		24,000		240,000	R/T
231	200	30,000			230,000	T
70	500	15,000			200,000	T
236	550	15,000			200,000	R/T
198	400	8,000			150,000	
11	435	18,000			140,000	T
16	600	15,000 4,550			130,000	T
165	254	30,000			54,000	T
128	1,400		15,000			R
179	450	•	10,000			R/T
32	1,100	15,000				T
184	200	40.000	10,000			R
233	300	40,000				T
235	195 300	14,000				Ţ
148 132	1,600	12,000				T
5	700		20,000			R/T
92	200	25,000 10,000				T T
161	600	10,000	15,000			R
Ave.	614	25,025 15,913	19,143		268,500	
Tot.	19,036				5,370,000	

#### ALL FACILITIES

Ave. 658 23,967 15,913 17,889 18,000 1,158,152 Tot. 38,166 53,275,000

### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: MISSOURI RIVER

Ref.	Berth Length	Loading (Bu/Hr To Barge Storage	from	Rail	Unloading (Bu/Hr) From Barg Storage T	• to	Capacity (Bu) Flat & Elev.	Fleet	:	Elev. Svc. (R/T)
				MAJO	R FACILITI	es				
52	600	30,000					10,000,000			R/T
54	900	19,000					10,000,000			R/T
43	850	20,000					4,300,000			R/T
67	190	20,000					3,944,000			R/T
85	700	14,000					1,600,000			R/T
58	250	14,000					1,593,000			R/T
22	200	7,000					1,500,000			R/T
28	600	20,000					1,380,000			R/T
76	200	5,000					1,024,000			R/T
29	195	5,000					1,000,000		130	R/T
74	550	10,000					956,000			R/T
62	175	18,000					950,000			R/T
44	430	18,000					900,000			R/T
73	280	6,000					842,000			R/T
69	195	5,000					800,000			T
26	195	4,500					741,000			T
	- 7.84					_				
Ave .	407	13,469					2,595,625			
Tot.	6,510						41,530,000			
				MINO	R FACILITI	<u>es</u>				
78	110						054 000			_
32	180	4,000					854,000			T D/m
72	195	13,000					450,000			R/T
80	825	11,000					357,000 250,000			R/T T
106	900		8,000				200,000			R/T
19	300	0,000	5,000				200,000			T
102	200		5,000							Ť
89	150		3,600							Ť
Ave.	358	9,000	5.400			***	422,200			
		-,000	5, 400				422,200			
Tot.	2,860						2,111,000			
				_AI	L FACILITI	es				
Ave .	390	12,575	5,400				2,078,143			
Tot.	9,370						43,641,000			

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

		To Barge from Storage Truck	Rail	(Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet 0 Dock Near	Svc. (R/T)
			MAJOI	R FACILITIES			
241	737			30,000	4,000,000		R, T
226	380	40,000		•	3,600,000		R, T
62	250	30,000			3,500,000		T
208	740	67,000			2,600,000		R, T
124	525	20,000			2,000,000		R, T
197	260	25,000			1,800,000		R, T
218	260	25,000			1,800,000		R, T
133	150	15,000			1,400,000		R, T
215	400 360	20,000		0.500	1,300,000		R,T
58	130	12,000		2,500	1,200,000		T
199	180	30,000			1,000,000 900,000		T
111	250	20,000			520,000		R, T T
152	600	20,000	33,000		320,000		Ř
Ave.	373	27,636	33,000	16,250	1,970,769	<del></del> -	
Tot.	5,222				25,620,000		
			MINO	R FACILITIES			
			*****	· <u> </u>			
55	200	9,000			1,250,000		T
203	175	15,000			350,000		T
142	175	15,000			320,000		R, T
30	560	35,000			300,000		T
191	100	11,000			260,000		T
97	150	12,000			240,000		R, T
94	325	10,000			210,000		T
121	350	20,000			160,000		T
144	300	10,000			150,000		T
154 238	100 <b>44</b> 2	16,700 50,000 50,000	E0 000		150,000		T
237	380	35,000	30,000		120,000		R, T
162	190	20,000			115,000		R, T
94	150	7,100			100,000 <b>44</b> ,000		T T
119	195	6,600 6,600			30,000		T
74	425	-, -, -, -, -, -, -, -, -, -, -, -, -, -			30,000		T
231	200	18,000					Ť
Ave.	260	19,715 18,140	50,000	<del></del>	253,267		
Tot.	4,417				3,799,000		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

Ref. Berth (Bu/Hr) (Bu/Hr) Capacity (Bu) Fleet Svc.
No. Length To Barge from Storage Truck Rail Storage Tr/Rail Dock Near

#### ALL FACILITIES

Ave. 311 23,346 18,140 41,500 16,250 1,050,679 Tot. 9,639 29,419,000

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

#### WATERWAY: OUACHITA - BLACK RIVERS

Ref. No.	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck		Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Elev. Svc. (R/T)
			MAJ	OR FACILITIES		
4	390	33,000			3,000,000	T
3	675	20,000			2,000,000	T
Ave.	533	26,500			2,500,000	 
Tot.	1,065				5,000,000	
			_A]	LL FACILITIES		 
Ave.	533	26,500			2,500,000	
Tot.	1,065				5,000,000	

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: WHITE RIVER

Ref.	Berth Length	Loading Rate (Bu/Rr) To Barge from Storage Truck		Unloading Rate (Bu/Hr) From Barge to Storage Tr/Rail	Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
			MAJO	R FACILITIES			
1 11 6 5 12 8 9	400 285 380 210 390 200 335	10,000 20,000 15,000 28,000 8,000 16,000 20,000			3,000,000 2,200,000 2,100,000 1,600,000 1,500,000 1,400,000 1,020,000		TTTTTT
Tot.					12,820,000		
			_AL	L FACILITIES			
Ave.	314	16,714			1,831,429		
Tot.	2,200				12,820,000		

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: TENNESSEE RIVER

	Berth Length	• • •	rom	(Bu/Hr From Bar	) ge to	Total Storage Capacity (Bu) Flat & Elev.	
				MAJOR FACILI	ri <b>es</b>		
99	575	15,000		15,000		7,600,000	R, 1
114	195	-,		10,000		3,000,000	R, T
159	1,100	8,000		8,000		2,147,000	R, T
158	512			8,000		2,000,000	R, T
101	250	8,000		8,000		1,800,000	R, T
19	195	12,000				1,760,000	_ <b>T</b> _
53	530	15,000				1,500,000	R, T
116	380			7,000		1,000,000	R <sub>.</sub> 1
24	195	10,000 10	,000			600,000	T
112	610	5,000		1,000		550,000	R <u>,</u> 1
44	480	22,000		6 000		500,000	T
90	350			6,000		400,000	R, T
Ave.	448	11,875 10	,000	7,875	· · ·	1,899,750	
Tot.	5,372					22,797,000	
				MINOR FACILI	ries		
98	300	10,000		9,000		400,000	R, T
156	400	,		10,000		355,000	R, T
68	195	8,000		·		290,000	T
108	290	7,000		7,000		220,000	R
121	580	•		3,500		130,000	R, T
113	275	4	,000		4,000	110,000	T
189	688			2,000		100,000	R, 1
142	490	1	,000				T
14	200		,000				T
81	1,385	1	,100				T
148	195				10,000		T
87	530	20,000					R, T
Äve.	461	11,250 6	, 525	6,300	7,000	229, 286	<del></del>
Tot.	5,528					1,605,000	
			<b></b>	ALL FACILITI	<u> </u>		
Ave.	454	11,667 7	, 220	7,269	7,000	1,284,316	
Tot.	10,900					24,402,000	

Date: 10/17/88

#### SUMMARY OF GRAIN-HANDLING BARGE FACILITIES

WATERWAY: TENNESSEE-TOMBIGBEE WATERWAY

	Berth Length	Loading Rate (Bu/Hr) To Barge from Storage Truck		(Bu/Hr From Bar	) ge to	Total Storage Capacity (Bu) Flat & Elev.	Fleet	Elev. Svc. (R/T)
			MAJ	OR FACILI	TIES			
21 14 10	200 500 400	5,000 10 000 15,000		3,000		1,000,000 730,000 507,000		T T
Ave.	367	10,000		3,000		745,667		
Tot.	1,100					2,237,000		
			MIN	OR FACILI	TIES			
15 16 3		16,000 10,000	3,500	3,500	3,500	325,000 135,000		R, T T R
Ave.	528	13,000	3500	3,500	3,500	230,000		
Tot.	1,585					460,000		
			ALL	FACILITI	<b>E</b> S			
Ave .	448	11,200	3,500	3,250	3,500	539,400		
Tot.	2,685					2,697,000		



# COAL HANDLING TERMINALS

Transfer rates between barge and truck, rail and/or storage areas are given when available. Facilities are arranged according to on-site open storage area and grouped according to extent of operation. In some instances, the total open storage areas indicated are not necessarily available for coal storage at any given time. Facilities are subdivided into 3 categories generally based upon storage capacities. Major Facilities handle coal or coke exclusively or as a major commodity usually associated with power plant, mine or heavy industrial usage. Minor Facilities handle lesser amounts of coal and usually with slower rates. Sporadic Facilities are identified as those where coal is not necessarily the major commodity handled nor is there any specific area dedicated to coal storage. Also, smaller facilities operating on a non-regular, intermittent basis usually fall into this category.

## Date: 10/17/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

### WATERWAY: ALLEGHENY RIVER

Ref. No.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck		Total Storage Capy (tons) Open Covered Remrks
			MAJOR FACILITIES	
237 233			1,500 150	322,000 410,000
Avg.	1,773	<del></del>	825	366,000
Tot.	3,545			732,000
			MINOR FACILITIES	
227	400			100,000
229		800		500,000
Avg.	375	800		300,000
Tot.	750			600,000
			SPORADIC FACILITIES	
212	1,000			ı
216				300,000
220		200 200		20,000
231	195	200		5 Acre
Avg.	595	200 200		160,000
Tot.	2,380			320,000
			ALL FACILITIES	
Avg.	834	500 200	825	275,333
Tot.	6,675			1,652,000

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/11/88

## WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (McCLELLAN-KERR-ARKANSAS RIVER NAVIGATION SYSTEM)

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		Unloading rate (Bu/Hr) From Barge to		Total Storage Capy (tons) Open Covered Remrks		
				MINOR	FACILITIES			
70	400	700				6,000		
91	400		400					
71	300	300	300			4,500	I	
74	200				250			
86		250				20,000		
90	190		400					
Avg.	282	417	367		250	10,167		
Tot.	1,690					30,500		
				SPORA	DIC FACILITIES			
67	1,400							
80	•							
65	250							
Avg.	663	<del></del>	<del></del>			<del>-</del>	· · · · · · · · · · · · · · · · · · ·	
Tot.	1,990							
				ALL F	<u>ACILITIES</u>			
Avg.	409	417	367		250	10,167		
Tot.	3,680					30,500		

#### SUMMARY OF COAL-HANDLING BARGE FACILITIES

:	WATERWAY	: BLACK SYSTEM		-TOMBIG	Bee-Mobii	E RIVERS	(BLACK	WARRIC	R RIVER	
		Loading	•		Unloadin	g rate				
Ref	Berth	(Tons/			(Tons/H		Tota	al Stor	age Cap	v
No.									ons)	
110.	(ft)	Storage	Truck	Rail	From Bar Storage	Truck Ra	il 0	pen	Covered	Remrks
				MAJOR	FACILITIE	:8	<del></del>			
50	2,600	2,200			1,200		1,	000,000		
42	2,000				1,900		1,	300,000	)	2 unl
81	1,800	870						600,000	)	
35					400			500,000	)	
63		1,000						200,000	)	
82		1,000						000,000		
83		1,200					-,	,		use 8
78		1,150						150,000	)	
80		1,550						150,000		
65		1,500						54,000		
62		2,000						30,000		
61		1,000						20,000		
								2,000		
64	200	1,000						2,000	,	
Avg.	800	1,315			1,167			417,16	7	_
Tot.	10,405						5,	006,000	)	
				MINOR	FACILITIE	នេ				
88	1,000	800			500			150,000	0	
73	800	2,200		600				200,000	0	
90	600	1,200						100,000	0	
74	400		1,000					•		use 7
76	400	2,200	1,150					50,000	0	
52		500	-,					40,00		
87		1,000						150,000		
Avg.	514	1,317	1,075	600	500			115,00	0	
Tot.	3,600							690,00	0	
<b></b>				ALL FA	CILITIES					<b></b>
Avg.	700	1,316	1,075	600	1,000			316,44	4	
Tot	14 005									
rot.	14,005						5,	696,00	U	

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/12/88

#### WATERWAY: CUMBERLAND RIVER

	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage Cap (tons) Open Covered	
			MINOR	FACILITIES		
15	5,000	2,200		4,000	3,000,000	
47	1,570	1,500				5 Acre
32	110	110			2,000,000	
Avg.	2,227	1,270		4,000	2,500,000	
Tot.	6,680				5,000,000	
			ALL FA	CILITIES		
Avg.	2,227	1,270		4,000	2,500,000	
Tot.	6,680				5,000,000	

## Date: 10/14/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

WATERWAY: GREEN RIVER

Ref. No.	Berth Length (ft)			Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage Ca (tons) Open Covere	apy ed Remrks
			MAJOR	FACILITIES		
77	3,384			4,000	2,000,000	
68	2,625			800	400,000	
75	1,600		1,800		·	Mine
76	1,400	1,100			30,000	
86				2,000	750,000	
67	875			1,600	400,000	
79	575	3,000			80,000	
71	270	3,000			100,000	
Avg.	1,512	2,367	1,800	2,100	537,143	<del></del>
Tot.	12,094				3,760,000	
			MINOR	FACILITIES		
66	1,440			300	51,000	
80	600	1,200		300	50,000	
83	500	800			24,000	
69	350	500			24,000	
84	300	3,000			30,000	
82	240	700			30,000	
74	200				150,000	I
73	195	750			25,000	-
81	195				23,000	I
70	175	2,100			60,000	-
Avg.	420	1,570 600		300	55,714	
Tot.	4,195				390,000	
				IC FACILITIES		
78	300				15,000	I
Avg.	300		-		15,000	
Tot.	300				15,000	
			ALL FA	CILITIES		
Avg.	873	1,869 600	1,800	1,740	277, 667	
Tot.	16,589				4,165,000	

## Date: 10/12/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: GULF INTRACOASTAL WATERWAY (EAST END to MILE 5W)

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	_	Total Storage C (tons) il Open Cover	apy ed Remrks
			MINOR FACILITIES		
51 42 45	2,235 840 324	2,000	1,200 3,000	30,000 38,000	600
Avg.	1,133	2,000	2,100	34,000	600
Tot.	3,399			68,000	600
			ALL FACILITIES		
Avg.	1,133	2,000	2,100	34,000	600
Tot.	3,399			68,000	600

330,200 22,000

#### SUMMARY OF COAL-HANDLING BARGE FACILITIES

### WATERWAY: ILLINOIS WATERWAY (Including barge facilities at the port of

Chicago)

Tot. 4,273

Loading rate

Unloading rate

Ref. Berth

(Bu/Hr)

(Bu/Hr)

Total Storage Capy

To Barge from From Barge to No. Length (tons) Storage Truck Rail Open Covered Remrks (ft) Storage Truck Rail MAJOR FACILITIES 181 2,865 200 20Acre 1,000,000 1,200 117 2,840 16 2,050 500 120,000 150,000 3 Acre 3,000 22 1,560 1,500 990,000 54 1,422 1,200 1,270 1,225 750 coke 71 25,000 725 coke 116 1,200 700 Inactv 142 400 175,000 48 1,110 400 400 250,000 39 1,075 30Acre 175 1,020 200 850 250,000 950 10 79 865 300 3 Acre 800 38 813 370,000 558 1,850 650 Avg. 1,448 950 2,960,000 Tot. 20,265 MINOR FACILITIES 112 1,400 150 500 150 20,000 175 73 880 3,200 145 670 175 22,000 22,000 coke 170 466 180 3 Acre 150 20 462 55 200 150 250,000 35,000 134 195 260 610 150 182 150 Avg. 180 500 66,040 22,000

3,738,200 22,000

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/12/88

WATERWAY: ILLINOIS WATERWAY (Including barge facilities at the port of

		Loading rate		Unloading rate		
Ref.	Berth	(Bu/Hr)		(Bu/Hr)	Total St	orage Capy
No.	Length	To Barge from		From Barge to	(	tons)
	(ft)	Storage Truck	Rail	Storage Truck Rail	Open	Covered Remrks

			SPORAL	DIC FACIL	ITIES			
103	2,300							182
145	2,288			1,000				13 <b>A</b> c
199	1,500			200	200			7 A
179	1,327			100				8 A
143	1,000			250	250		50,000	
127	1,000							5 a
92	875	1,000	1,000		800	800	100,000	
131	800	•	•	150	150	150	88,000	
194	720			150			•	8 A
104	580			150	150		50,000	
5	400			500	500	500	10,000	
108	285	150			150		150,000	
18	250						,	
Avg.	1,025	575	1,000	313	314	483	74,667	
Tot.	13, 325						448,000	
			ALL F	ACILITIES	<u> </u>			
Avg.	1,114	693 496	1,300	421	294	483	196,747	22,000

Tot. 37,863

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/12/88

#### WATERWAY: KANAWHA RIVER

Ref.	Berth Length (ft)	Loading (Bu/H To Barge Storage	ir) e from	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail		age Capy ons) Covered	
				MAJOR	FACILITIES			
23	3,240	3,300						
44		•		1,500				
22	1,710			4,000		2,000,000	)	
63				2,000				
62	1,050				900	500,000	)	
Āvg.	1,840	3,300		2,500	900	1,250,000	<u> </u>	
Tot.	9,200					2,500,000	)	
	<del></del>						. <b></b>	
				MINOR	<u>FACILITIES</u>			
59	1,960	400	400		500	30,000	1	
58		500	500		500	400		MINE
65	•	600	500			•••	_, _,	
46	-		1,500					I 2ac
52	,		600			16,000	)	
55			300			3,000		
43		400				280,000		
53	900	250						MINE
48	800					10,000	)	
40	800	250				,		I
45	700		500			3,000	)	
56	675		250			500		
34	600			250		1,000		
41	600	250				•		
72	500		300	300				
70	475	2,200			150	20,000	)	
49	380		275			1,000		
50	380		300			10,500	)	
95	240	2,200			125	250,000		
Avg.	868	783	493	275	258	48,108	2,000	)
Tot.	16,493					625,400	2,000	)
				ALL FA	CILITIES			
Ava -	1,071	1,035	493	1,610	419	208,360	2,000	)
_	•	2,000		_, 0_0		·	•	
Tot.	25,693					3,125,400	2,000	)

SUMMARY OF COAL-HANDLING BARGE FACILITIES

Date: 10/11/88

#### WATERWAY: KASKASKIA RIVER

1

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail		orage Capy tons) Covered Remrks
7	1,000		3,000		<del> </del>	
			ALL FA	CILITIES		
Avg.	1,000		3,000			
Tot.	1,000					

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/11/88

#### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Unloading rate (Bu/Hr) From Barge to Rail Storage Truck Rail	Total Storage Capy (tons) Open Covered Remrks
			MAJOR FACILITIES	
	3,600 3,255 2,330		5,000 3,600 1,100	3,600,000 56,000 560,000
Avg.	3,062		3,233	1,405,333
Tot.	9,185			4,216,000
			MINOR FACILITIES	
91 27	•	200	200 200	15,000 coke 24 Ac
Avg.	968	200	200	15,000
Tot.	1,935			15,000
			SPORADIC FACILITIES	
29	250			15 Ac
Avg.	250			
Tot.	250			
			ALL FACILITIES	
Avg.	1,895	200	2,020	1,405,333 15,000
Tot.	11,370			4,216,000 15,000

Date: 10/11/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

## WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO to MISSOURI RIVER)

		Loading rate (Bu/Hr) To Barge from Storage Truck		(Bu/ From Ba	Hr) rge to	Total Storage (tons) Open Cov	Capy ered Remrks
			MAJOR	FACILITI	<u> </u>		
84 143	•	4,500	4,500	850		500,000 500,000	
8	1,850	300	300			500,000	
3	1,700	5,700	5,700			500,000	
25	1,620		1,300			•	
4	900		2,200				
130	540	150		150		150,000	S-ck
Avg.	1,560	2,663	2,800	500		430,000	
Tot.	10,917					2,150,000	
			MINOR	<b>FACILITI</b>	ES		
166	1,000						
18	600			500	500		+R ck
135	395				300		Cr.
38	200						
22	195					61,000	ck
2	90					10,000	
Avg.	413			500	500	35,500	
Tot.	2,480					71,000	
			ALL FA	CILITIES			
Avg.	1,031	2,663	2,800	500	500	317,286	
Tot.	13,397					2,221,000	

#### WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

	Berth	Loading rate (Bu/Hr)		Unloading rate (Bu/Hr)	Total Storage Capy		
No.	(ft)	To Barge from Storage Truck		From Barge to Storage Truck Rail	(ton Open C	s) overed Remrks	
			MAJOR	FACILITIES		<del></del>	
33	3,280			1,200	1,500,000		
50	1,675			300	1,000,000		
156	1,400			1,250	685,000		
28	1,250			200	500,000		
217	1,200			1,000	400,000	4,000	
29	885			500	350,000	-,	
237	800	1,500	3,000		300,000		
36	300	_,	-,	250	1,000,000		
26	240				1,000,000		
Avg.	1,226	1,500	3,000	671	748,333	4,000	
Tot.	11,030				6,735,000	4,000	
			MINOR	FACILITIES .			
74	1,600	1,500	1,500		100,000		
132	1,600	1,500	1,500	350	100,000		
204	1,500			330	100,000		
128	1,400			700	250,000		
69	1,150			700	4,000		
144	1,100			200	300,000		
208	919			200	100,000		
167	900			150	90,000		
247	880			<b>450</b>	15,000		
215	840			500	120,000		
183	835			550			
93	800			500	200,000	ı	
212	740			200	150,000	•	
166	690			250	120,000		
230	656				176,000		
83	575			1,000 600	100,000 550,000		
63	500			450	75,000		
3	500	300	1	430	75,000		
17	500	500	•	120			
211	450			120	60,000		
233	300				100,000		
148	300			300	120,000		
203	300			300	120,000		
90	285				6,500		
155	225			250	65,000		
162	210				500,000		
234	160				200,000		
186	100			300	60,000		
253	30			300	30,000		
Avg.	691	1,500 300	1,500	404	139,660		
	20,045				•		

# Date: 10/11/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

Ref.		Loading rate (Bu/Hr) To Barge from Storage Truck		Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Stor (to Open		Remrks
			SPORAL	DIC FACILITIES			
102	1,150						I
32	1,100				60,000		
218	510				4 500		
207	400		1 400		4,500		
96 95	400 250		1,400				
22 <b>4</b>	200						
97	200						
Avg.	526		1,400		32,250		
Tot.	4,210				64,500		
			ALL FI	ACILITIES			
Avg.	767	1,500 300	1,967	482	285,861	4,000	
Tot.	35,285				10,291,000	4,000	

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/11/88

WATERWAY: MISSOURI RIVER

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	(Bu From E		(t	rage Capy ons) Covered Remrks				
	-		MINOR FACILITY	IES						
11	500		200		100,00	0				
41	400		350		125,00	0				
14	325	50	50		,					
40	300				3,00	0				
35	195			2,200	20,00	0				
Avg.	344	50	200	2,200	62,00	0				
Tot.	1,720				248,00	0				
	ALL FACILITIES									
Avg.	344	50	200	2,200	62,00	0				
Tot.	1,720				248,00	0				

# Date: 10/17/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: MONONGAHELA RIVER

Ref.	Berth Length	Loading rate (Bu/Hr) To Barge from		oading rate (Bu/Hr) m Barge to		Total :	Storage Capy (tons)
	(ft)	Storage Truck	Rail Sto	rage Truck	Rail	Open	Covered Remrks
			MAJOR FACI	LITIES			
126	4,300		2,0	00		1,000	. 000
171	3,910	2,500	2,0				,000
139	•	1,200	-, -				,
142	3,055	800					
124	2,619	900					
79	2,500		1,2	00			
80	2,400		•	60			
127	2,354	1,000	2,0			2	,000
128	2,145	1,000	-, •				,000
135	1,925	2,000	9	00			, 000
203	•			50			, 900
71	1,540		•		2,000	_	,
91	1,420		5	00	_,	300	,000
95	1,400	450	•				,000
123	1,320	1,000				_	,
121	1,320	400				15	,000
77	1,290	1,200				1,000	•
130	1,285	600					,000
191	1,000	800					,000
159	525						,
Avg.	2,083	988	1,3	01	2,000	263	, 492
Tot.	41,658					3,161	, 900

#### WATERWAY: MONONGAHELA RIVER

Ref.	Berth Length (ft)	Loading ra (Bu/Hr) To Barge f Storage Tr	rom	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage Capy (tons) Open Covered Re	emrks
				MINOR	FACILITIES .		
206	1,350	200					
140	1,113	300				3,000	
202	1,050					2,000	
129	1,050		500				
167	1,050					120,000	
157	1,050					,	
170	1,050	350				10,000	
169	1,050		300			•	
136	1,000						
146	1,000					8	
168	983						
186	910	500				5	
125	901	500					
109	875	350				4,500	
134	875					10,000	
166	790	450				30,000	
165	780	650				10,000	
102	728					18	
131	725	200				9,000	
131	725	200				9,000	
147	710						
137	700		500			3,000	
132	700		560			2,000	
138	700	500				30,000	
64	675						
88	580	500				500,000	
100	570						12 ac
148	520						7 ac
122	300	400				68,000	
Avg.	845	392	465	<del></del>		47,561	
Tot.	24,510					808,530	

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/17/88

#### WATERWAY: MONONGAHELA RIVER

Ref.	Berth Length	Loading rate (Bu/Hr) To Barge from		Unloading rat (Bu/Hr) From Barge to			orage Capy cons)	7
	(ft)	Storage Truck	Rail	Storage Truck	Rail	Open	Covered	Remrks
			SPORA	DIC FACILITIES				
85	525							20 ac
101	390							7 ac
182	376							4 ac
87	375							10 ac
196	250					25,00	0	
160	200							
118	175							
119 155	175 175	100						2 ac
174	90							z ac
7.4	30							
Avg.	273	100	<del></del>			25,00	0	
Tot.	2,731					25,00	0	
			ALL P	ACILITIES				
Avg.	1,168	678 392		1,301	2,000	133,1	31	
Tot.	68,899					,		
	· · · ·					3, 995, 43	30	

# SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/12/88

#### WATERWAY: TENNESSEE RIVER

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		Unloadi (Bu/ From Ba Storage	Hr)	*	age Capy ns) Covered	•
			MAJOR	FACILITI	<u>es</u>			
64	4,130			1,400		800,000		
50	2,940			600		1,500,000		
180	1,850	600 600	600			1,000,000		
132	1,650			600		1,000,000		
65	1,250			5,000		300,000		
38	1,159		10,000	•		·		100car
138	880	600	-,			100,000		
70	700	***	1,500			•		100car
41	450		_, _,	375				do. 40
Avg.	1,668	600 600	4,033	1,595		783,333		
Tot.	15,009					4,700,000		
			MINOR	FACILITI	<u>rs</u>			
170	1,430			200		300,000	1	Inactv
39	1,345							UC
40	1,200		6,000			80,000		230car
91	1,160			400		50,000	)	
186	1,063			300		20,000	1	
136	560							1.4 Ac
87	530							1.5 Ac
69	500					9,000	1	coke
142	490					15,000	)	coke
86	462					10,000	•	Inactv
143	450					5,000	)	
28	280				125			coleck
46	200							contnr
13	175			300			3,00	0 coke
Avg.	703		6,000	300	125	61,125	3,00	0
Tot.	9,845					489,000	3,00	0

## Date: 10/12/88 SUMMARY OF COAL-HANDLING PARGE FACILITIES

#### WATERWAY: TENNESSEE RIVER

Ref.	Berth Length	Loading rate (Bu/Hr) To Barge from		Unloadi: (Bu/l From Ba:	Hr)	Total Sto	rage Capy ons)	,
	(ft)	Storage Truck	Rail	Storage	Truck Rai	1 Open	Covered	Remrks
			SPORA	DIC FACIL	ITIES			<del></del>
36	700							tk-brg
52	700							8 Acre
10	700	500					14,200	) coke
185	650					20,00	0	
129	585							tr-brg
130	585							tr-brg
35	195			200				4 Acre
56	135			200				4 ACF
Avg.	531	500		200		20,00	0 14,200	)
Tot.	4,250					20,00	0 14,200	)
			ALL F	<b>ACILITIES</b>				
Avg.	939	550 600	4,525	938	125	347,26	7 8,600	)
Tot.	29,104					5,209,00	0 17,200	)

## Date: 10/12/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: OHIO RIVER (PITTSBURGH to CAIRO)

	Berth	Loading rate (Bu/Hr)		Unloading rate (Bu/Hr)	Total Storage	e Capy
No.	Length	To Barge from		From Barge to	(tons)	
	(ft)	Storage Truck	Rail	Storage Truck Rail	Open Cor	vered Remrks
		_	MAJOR	FACILITIES		
129	5,800			2,000	700,000	
183	5,800			1,500	2,500,000	
7	5,280		2,600		300,100	
193	4,070			4,000	1,000,000	
109	3,650			4,000	1,500,000	
189	3,600			3,600	900,000	
242	3,570			8,000	2,700,000	
243	3,400			2,000	1,000,000	
8	3,380			5,000	1,700,000	
100	3,300			5,000	700,000	
156	3,285			5,500	1,500,000	
14	3,000		3,000			
103	•			3,600	1,000,000	
9				2,000	1,365,000	
121	2,745	3 500		1,500	986,000	
43	2,500	3,500	900		700,000	
148 90	2,280	3 500	900		7,500	
1	2,200	3,500	1,000		700,000	
10	2,000 2,000		2,450		25,015	180
159	1,970		2,450	750	500,000	100
173	1,900			700	1,200,000	
235	1,810			1,000	1,600,000	
143	1,800			1,500	1,400,000	
174	1,800			700	1,200,000	
250	1,750	1,000		,,,,	15,000	
22	1,658	2,000		850	500,000	
207	1,560			900	550,000	
12	1,560			4,250	2,200,000	
160	1,500			450	300,000	
252	1,325		1,700		,	
110	1,220	1,100	_,		1,000,000	
3	1,200	,	900		-,	
71	1,120			1,300	1,800,000	
10	780		900	·	1,255	
51	700				1,000,000	
37	525		1,500			40 ac
155	440			1,200	600,000	
Avg.	2,423	2,700 1,000	1,661	2,554	1,004,542	180
Tot.	92,078				33,149,870	180
Tot.	92,078 			,	33,149,870	180 

## SUMMARY OF COAL-HANDLING BARGE FACILITIES Date: 10/12/88

#### WATERWAY: OHIO RIVER (PITTSBURGH to CAIRO)

Loading rate Unloading rate

Ref.	Berth	(Bu/Hr)		(Bu/Hr		Total Sto	rage Capy	J
No.		To Barge fi	com	From Baro	•		ons)	z .
	(ft)	Storage Tru			ruck Rail	Open	Covered	Remrks
			MINOR	FACILITIES	L			<del></del>
188	1,960			190		30,00	0	
226	1,900					1	2	
77	1,680	400				80,00	0	
20	1,591			900			4,000	D
212	1,570	900				100,00		
211	1,555	900				100,00	0	
210	1,515							
236	1,500			300		65,00	0	
112	1,400			170		7,40		
28	1,384			500		250,00	0	
45	1,315	1,800				84,00	0	
53	1,300	4,500				400,00	0	
194	1,250	600				50,00	0	
144	1,200	1,200				10,00		
34	1,200			1,600		200,00	0	
52	1,200							
138	1,160					100,00	0	
16	1,140				500			
190	1,100					150,00		
111	1,100			850		25,00	0	
11	1,050			200				3 <b>a</b> c
264	1,010				300			
167	1,000	150				75,00	0	
165	1,000			350				
41	1,000			600		15,00		
240	950	750				20,00	_	
203	950	3,500				16,00		
44	950	700				200,00		
59	950	500				4,80	0	
209	900	200						
234	900							15 ac
157	900	1,500				12,00	_	
246	895	500				20,00		
235	890	600				200,00		
244	880	600		250		10,00		
76	875	500		350		100,00		
184	875	1,000				90,00		
120	800	400		500		3,600,00		
85	720	400		4 ==		75,00	U	_
30	700	275		175				8 ac
199	700	E00				70.00	•	3 <b>a</b> c
75	700	500				70,00		
185	700 695	1,000	250			100,00		
139	695	4	250			125,00	U	

#### WATERWAY: OHIO RIVER (PITTSBURGH to CAIRO)

	Total Stora (tor Open (		Hr) rge to	Unloadi (Bu/) From Ba: Storage	Rail	ir) e from	Loading (Bu/I To Barge Storage	Berth Length (ft)	Ref.
3 ac		<del></del>		300		200		690 650	27 186
						250		615	108
	2,000					100		600	84
	200,000						1,400	600	55
	400,000						750	600	80
	3,000						450	585	233
								580	184
	20,000					750		565	252
	1,000,000			1,000				530	111
	50,000			300				525	10
	300,000						850	525	38
	10,000						350	440	201
	50,000 6,000						150 800	430 400	205
7 ac	8,000						800	395	101 164
25 ac							500	390	149
23 40	100,000						1,200	390	54
	30,000						300	360	50
	4,000						300	350	245
	85,000						930	315	108
	,		100					300	269
								300	96
	100,000						530	300	92
	7						400	275	13
	250,000			450				240	53
	15,000						500	220	202
								210	173
	10,000	110						200	105
	2,000	110						200	107
25 ac				500				200	148
								200	158
	1,000,000							195	127
	100 000					500		195	196
	100,000						1,000	195	110
	60,000						1,500	172	182
	1,000,000			200			500	150 120	92
8 ac				200				115	183 229
U ac				400				100	225
4,000	192,780	255	100	492		342	858	755	Avg.
4,000	11,181,219							63,432	Tot.

## Date: 10/12/88 SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: OHIO RIVER (PITTSBURGH to CAIRO)

	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		Unloading (Bu/Hr From Barg Storage T	)	Total Storag (tons Open Co	
			SPORAD	IC FACILIT	IES		
93 170 158	300 230 200					100	
24 169	195 120					10,000	
Avg.	209					5,050	
Tot.	1,045					10,100	
160	275					25,000	
Avg.	275					25,000	
Tot.	275					25,000	
			ALL FA	CILITIES			
Avg.	1,225	984 436	1,661	1,617	100 255	471,981	2,090
Tot.	156830					44,366,189	4,180

Date: 10/12/88

#### SUMMARY OF COAL-HANDLING BARGE FACILITIES

#### WATERWAY: TENNESSEE-TOMBIGBEE WATERWAY

Loading rate (Bu/Hr) Unloading rate (BU/Hr) Total Storage Capy
From Barge to (topa) Ref. Berth No. Length To Barge from

(ft) Covered Remrks

Storage Truck Rail Storage Truck Rail Open Cove

#### MINOR FACILITIES

100

Avg. 1,000 100

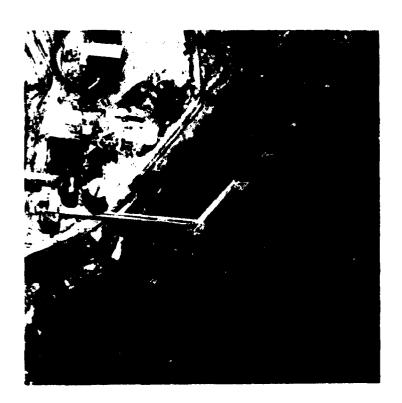
Tot. 1,000

ALL FACILITIES

Avg. 1,000 100

Tot. 1,000

3 1,000



# PETROLEUM HANDLING TERMINALS

Where data is available, asphalt and crude oil storage facilities are shown separately, listings being arranged in descending order of tankage. Major Facilities are perceived as refineries, power plants or large industries receiving a majority of their fuel oil by barge, or an active terminal with 1,000,000 + barrel dedicated petroleum storage capacity. Medium Terminals are identified as engaged in local fuel distribution, a minor industry, a minor crude oil collection facility, or one in which total petroleum handling represents a very minor portion of waterfront activity. Minor Facilities could be inactive but viable, have minimum of activity with small tankage, be used only sporadically, or handle crude oil on minuscule basis.

Date: 9/23/88 SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

WATERWAY: ALABAMA RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
101	160	R	110,000	
100	780	R	40,000	
95	200	S		12,000
94	300	S		8,000
93	300	S		6,000
91	200	S		5,300
92	300	S		5,000
Average:	320		75,000	7,260
Total:	2,240		150,000	36,300
			ALL FACILITIES	
Average:	320		75,000	7,260
Total:	2,240		150,000	36,300

Date: 9/22/88
SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: ALLEGHENY RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILY	ITY (BBLS) ASPHALT
			MEDIUM FACILITIES		
234	455	R	238,100		
228	350	R/S	214,000		
214	200	R	166,700		
208	340	R	131,000		
210	195	R/S	107,000		
236	401	R			154,000
Average:	324		171,360		154,000
Total:	1,941		856,800		154,000
			ALL FACILITIES		
Average:	324		171,360		154,000
Total:	1,941		856,800		154,000

Date: 9/23/88

#### SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: APALACHICOLA, CHATTAHOOCHEE, FLINT RIVERS

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
21	100	x	95,000	
17	30	R	70,000	
15	200	R	22,600	
23	586	R	20,000	
9	150	R	·	80,000
Average:	213		51,900	80,000
Total:	1,066		207,600	80,000

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

Date: 10/11/88

## WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (MCCLELLAN-KERR-ARKANSAS RIVER NAVIGATION SYSTEM)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
36 99 97 75 34 88 76 77 19 21 56	400 275 600 700 150 195 100 150 400 300 110	R R R R/S R R/S R/S R/S R/S R	490,000 263,750 225,000 205,000 198,000 120,000 110,000 100,000 75,000 50,000 ALL FACILITIES	135,000 225,000 144,000 77,000
Average:	307		176,068	145,250
Total:	3,380		1,936,750	581,000

Date: 9/23/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: BLACK WARRIOR-TOMBIGBEE-MOBILE RIVERS (BLACK WARRIOR RIVER SYSTEM)

	SYSTE	M)		·	
REF.	BERTHING	RECEIPT	TANKAGE CONNECTED		
NO.	LENGTH		PETROLEUM	CRUDE OIL	ASPHALT
	(FT)	SHIPMENT	PRODUCTS		
			MEDIUM FACILITIES		
51	372	R/S	222,500	210,000	
30	200	Ŗ	9,700 و 1		
86	350	R/S	55,000	260,000	
58	200	S		110,000	
Averag	ge: 281		149,067	193,333	
Total	: 1,122		447,200	580,000	
			MINOR FACILITIES		
75	200	x	150,000		
34	240	R	95,200		
89	200	R	60,000		
43	200	R	40,500		
79	240	R	27,400		
29	200	R	17,900		
40	200	S		80,000	
32	212	x		80,000	
85	200	R/S			70,000
68	300	R			50,000
Averag	ge: 219		65,167	80,000	60,000
Total:	2,192		391,000	160,000	120,000
			ALL FACILITIES		
Averag	ge: 237		93,133	148,000	60,000
Total:	3,314		838,200	740,000	120,000

Date: 9/23/88

#### SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: COLUMBIA-SNAKE RIVER SYSTEM (ABOVE THE DALLES - MILE 191.5)

		RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MEDIUM FACILITIES	
130 132 124 114	265 300 500 300	R/S R/S R R/S	590,000 379,200 285,700 212,000	
Avera	ge: 341		366,725	
Tota	1: 1,365		1,466,900 MINOR FACILITIES	
142	375	R	85,000	
Avera	ge: 375		85,000	
Tota	1: 375		85,000	
			ALL FACILITIES	
Avera	ge: <b>348</b>		310,380	
Tota	1: 1,740		1,551,900	

Date: 9/22/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: CUMBERLAND RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FAC CRUDE OIL	ILITY (BBLS) ASPHALT
			MEDIUM FACILITIES		
20	450	R	425,000		90,000
31	375	R	357,000		
25	190	R	347,000		
37	175	R	192,000		
22	150	R	140,000		
40	280	R	20,000		160,000
48	275	R			140,000
Average:	271		246, 833		130,000
Total:	1,895		1,481,000		390,000
			MINOR FACILITIES		
41	200	x	210,000		
29	330	R	59,500		
19	175	R	23,000		
30	800	s		25,000	
Average:	376		97,500	25,000	
Total:	1,505		292,500	25,000	
			ALL FACILITIES		
Average:	309		197,056	25,000	130,000
Total:	3,400		1,773,500	25,000	390,000

Date: 9/23/88

#### SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: GULF INTRACOASTAL WATERWAY (EAST END TO MILE 5W)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MAJOR FACILITIES	
50	590	R	930,000	
Avera	ge: 590		930,000	
Total	: 590		930,000	
			MEDIUM FACILITIES	
55	424	R	150,000	
Avera	ge: <b>424</b>		150,000	
Total	: 424		150,000	
			MINOR FACILITIES	
<b>49</b> 310	104 180	R R	11,900 6,000	
Averag	ge: 142		8,950	······································
Total	: 284		17,900	
			ALL FACILITIES	
Averag	ge: 325		274,475	
Total	: 1,298		1,097,900	

## Date: 9/22/88 SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

WATERWAY: KANAWHA RIVER

REF NO.		RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MEDIUM FACILITIES	
38	500	R	184,000	
21	195	R	119,000	
80	390	R	117,300	
5°	400	R	115,600	
Average	371		133, 975	
Tota	1: 1,485		535,900	
			MINOR FACILITIES	
60	400	R	79,000	
29	195	R	69, 900	
4*	392	R	19,500	
Average	329		56,133	
Total	.: 987		168,400	
			ALL FACILITIES	
Average	353		100,614	
Total:	2,472		704,300	

Date: 9/21/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: ILLINOIS WATERWAY, INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACII	LITY(BBLS) ASPHALT	REMARKS
			MAJOR FACILITIES			
115	2,050	R/S	8,000,000			
62	1,250	R	4,290,000			
80	850	R/S	2,402,000			INC
71	1,270	R/S	1,800,000			-
200	376	R/S	928,700			
Average	: 1,159		3,484,140			
Total:	5,796		17,420,700			
			MEDIUM FACILITIES			
			MOIGH PROJUCTION			
149	750	S	1,215,000			
83	920	R/S	880,000			
92	650	R/S	875,000			INC
201	350	R	750,000			
164	1,220	R/S	610,200			INC
74	555	R/S	576,000			
69	567	R/S	552,000			
100	2,740	R/S	541,000			INC
59	920	R	500,000			
73	200	R	474,000			
62	810	R/S	430,000			INC
121	2,661	R/S	400,000			INC
30	400	R	380,600			
16	195	R	260,000			
32	100	R	257,400			
56 57	292	R	241,000			
57	275	R	230,000			
53	195	R	226,100			
55 113	150 430	R P/S	212,000			
9	540	R/S	210,000			
34	400	R R	190,500			
128	200	R/S	119,000			
146	1,861		100,000			
35	400	R	95,200 93,500			
106		R	92,500 85 000			TNO
143	500 1,000	R R	85,000		350 000	INC
77	350	R R			350,000	
132	400	R			225,000	
		R			114,000	
Average	: 691		403,942		229, 667	
Total:	20,031		10,502,500		689,000	

Date: 9/21/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: ILLINOIS WATERWAY, INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO

	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FAC CRUDE OIL	ILITY(BBLS) ASPHALT	REMAPKS
			MINOR FACILITIES			
70	2,221	R	673,300			x
49	1,853	R/S	522,750			х
72	330	R	512,300			X
85	290	R	470,000			x
66	700	R	400,000			x
63	597	R	241,000			
197	310	R	165,000			
129	315	R	85,000			
64	85	R	76,700			
102	400	R	71,500			х
83	540	R	47,600			х
75	760	R/S	700			
4	150	S		2,500		
Average	: 658		272,154	2,500	· · · · · · · · · · · · · · · · · · ·	
Total:	8,551		3,265,850	2,500		
			ALL FACILITIES			
Average	: 731		725,327	2,500	229,667	
Total:	34,378		31,189,050	2,500	689,000	

<sup>(</sup>X) - INACTIVE WHARF OR PETROLEUM HANDLING FACILITIES
(INC) - TANKAGE INCLUDES OTHER BULK LIQUIDS/BREAKOUT OF DEDICATED PETROLEUM TANKAGE IS NOT AVAILABLE OR IS TOO VARIABLE TO DEFINE ACCURATELY

Date: 10/11/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MAJOR FACILITIES	
68	530	R	1,850,000	
23	550	R	1,500,000	
115	390	R/S	1,040,000	
96	300	R/S	1,000,000	
128	600	R	1,000,000	
121	980	S	985,000	
Average:	558		1,229,167	
Total:	3,350		7,375,000	

#### SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

#### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FAC CRUDE OIL	ILITY (BBLS) ASPHALT
			MINOR FACILITIES		
10	290	R/S	925,000		
52	1,000	S	420,000		
12	390	R/S	417,000		
39	775	R	411,300		71,800
74	275	R	397,000		
30	125	R	378,000		
114	250	R/S	332,100		
14	300	R/S	275,000		
9	195	R/S	266,000		
80	300	R	237,000		
26	260	R	179,000		
22 107	200 195	I R	175,000		
41	200	R/S	165,000 163,500		
81	200	R/S	163,500 135,000		
38	300	R	125,000		
40	320	R/S	122,000		
88	240	R	121,000		73,000
53	450	R	119,500		, 5, 000
28	110	R	116,000		
31	100	R	116,000		
24	273	R	111,700		
98	250	R	110,000		
82	175	R	109,350		
97	425	R	95,200		
9	300	R/S	75,000	810,600	
50	175	R	70,000		
4	195	R/S	70,000		
67	195	I	50,000		
6	2,330	R	47,000		
33	150	R/S	40,000		73,000
92	140	R	40,000		
67	215	R	21,400		
11	360	R		625,000	
24	400	R		328,000	
23	200	R/S		210,000	
25	300	R/S		200,000	
18 27	590 250	R		150,000	6E 700
18	175	κ.			65,700 50,000
88	250	I			30,000
rage:	337	<del> </del>	195,002	387,267	66,700
otal:	13,823		6,435,050	2,323,600	333,500

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE to CAIRO)

REF. BERTHING RECEIPT TANKAGE CONNECTED TO BARGE FACILITY(BBLS)
NO. LENGTH AND/OR PETROLEUM CRUDE OIL ASPHALT

(FT) SHIPMENT PRODUCTS

ALL FACILITIES

Average: 365 354,104 387,267 66,700

Total: 17,173 13,810,050 2,323,600 333,500

Date: 8/09/88

## SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO to MISSOURI RIVER)

			•		
REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACIL	ITY (BBLS) ASPHALT
_			MAJOR FACILITIES		
17	500	R/S	2,100,000		
Average:	500		2,100,000		
Total:	500		2,100,000		
			MEDIUM FACILITIES		
36	370	R/S	800,000		
122		R/S	595,200		
35		R/S	500,000		
114		R/S	481,000		
112		R/S	476, 200		
171	40	R/S	444,000		
133		R	265,000		
92	380	R/S	242,500		135,000
113	380	R/S	214,300		,
37	460	R	·	680,000	
Average:	341		446, 467	680,000	135,000
Total:	3,410		4,018,200	680,000	135,000
			MINOR FACILITIES		
27	240	R	200,000		
109		R	160,000		
164		R	114,000		
162		R	101,200		
132	195	R	96,000		
165	365	R	78,000		
108	225	R	48,800		
116	390	R/S	30,000		
94	200	R	9,500		
Average:	295		93,056		
Total:	2,655		837,500		
			ALL FACILITIES		
Average:	328		366,089	680,000	135,000
Total:	6,565		6,955,700	680,000	135,000

## SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE F. CRUDE OIL	ACILITY (BBLS) ASPHALT
		-	MAJOR FACILITIES		
47	535	s	4,700,000		
52	650	R/S	3,000,000		
2	350	R	1,000,000		
87	425	R	1,000,000		
89	400	x	906,000		
133	689	S	873,000		
33	1,980	x	838,000		
45	515	R/S	600,000		
41	540	R/S	240,000	699,000	
57	440	R/S	208,000	<b>928,0</b> 00	215,000
46	535	R/S		2,600,000	2,000,000
135	1,620	R		1,844,300	
50	400	R/S			1,000,000
48	535	R/S			
e <del>rage:</del>	687		1,336,500	1,517,825	1,071,667
Total:	9,614		13,365,000	6,071,300	3,215,000

# Date: 10/13/88 SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
88	300	R	712,000	
139	300	R/S	607,100	
242	96	Ŕ	418,000	
191	75	R	362,250	
206	150	R	357,200	
84	200	R	357,100	47,600
58	200	R/S	350,000	2,,000
193	400	R	340,000	
194	350	R	313,000	
153	400	x	309,500	
163	750	R	280,000	53,000
85	200	x	229,000	33,000
175	415	R	220,000	100,000
21	450	R	214,300	100,000
244	175	R		
188	300	X	166,700	
205			166,700	170 000
189	400	R	160,000	170,000
	195	R D/C	150,000	
48	675	R/S	142,800	
226	200	R	126,200	502 000
59	230	R	95,200	523,800
41	600	R	95,20C	166,700
248	280	R	38,000	
134	195	S		1,723,380
95	250	R		190,500
98	195	R		142,900
69	245	R		59,500
49	535	S		
erage:	313		270,011	317,738
Total:	8,761		6,210,250	3,177,380
			ALL FACILITIES	
	438		593,189	1 517 905 401 700
rerage:	430		393, 169	1,517,825 491,722

Date: 10/11/88 SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: MISSOURI RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILICATION CRUDE OIL	TY (BBLS) ASPHALT
			MAJOR FACILITIES		
37	428	x	1,200,000		
Average:	428		1,200,000		· · · · · · · · · · · · · · · · · · ·
Total:	428		1,200,000		
			MINOR FACILITIES		
42	600	R			170,000
53	480	×			
57	400	R	256 222		83,000
<b>47</b> 105	360 300	R R	256,000		200,000
87	300	X	83,300		200,000
17	280	x	03,300		
Average:	389		169,650		151,000
Total:	2,720		339,300		453,000
			ALL FACILITIES		_
Average:	394		513,100		151,000
Total:	3,148		1,539,300		453,000

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: MONONGAHELA RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
<del></del>			MEDIUM FACILITIES	
90	320	R	283,000	244,100
65	150	R/S	214,000	
67	312	R/S	203,000	
201	1,000	R	190,500	
72	450	R	190,000	
92	450	R	156,200	
111	465	R	156,000	
73	525	R/S	119,000	71,400
203	175	R/S	28,800	102,400
78	195	R/S		380,000
Average:	404		171,167	199,475
Total:	4,042		1,540,500	797,900
			MINOR FACILITIES	
162	240	R	83,000	
107	490	R/S	54,700	25,200
74	350	x	47,600	
69	150	R	47,600	
143	150	R	44,000	
161	134	R	40,000	
180	386	R	28,500	
141	200	R	19,000	
183	350	R/S	15,500	
120	100	X	8,300	
181	140	R/S	·	17,850
Average:	245	<del></del>	38,820	21,525
Total:	2,690		388,200	43,050
			ALL FACILITIES	
Average:	321		101,511	140,158
Total:	6,732		1,928,700	840,950

## SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FA	CILITY (BBLS) ASPHALT
			MAJOR FACILITIES		
217L	303	R/S	1,110,000		
150C	135	S	986, 900		
175H	340	R/S	934,000		
48P	817	R/S	835,000		
216L	150	R/S	800,000	450,000	
131C	175	R	750,000		
133L	400	R/S	750,000		
168H	450	R/S	685,000		
2 <b>H</b>	1,028	S	673,500		
136L	110	R/S	524,000		
134C	100	R	501,000		
113C	220	R	490,000		
33₽	280	R/S	450,000		
55P	540	R/S	400,000		
102L	195	R/S		1,000,000	
153C	400	R/S		688,000	1,023,000
134L	356	R			1,000,000
163H	370	R/S			595,000
163H	370	R/S			595,000
130H	130	R/S			465,000
rage:	343	<del></del>	706,386	712,667	735,600
otal:	6,869		9,889,400	2,138,000	3,678,000

## SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACI: CRUDE OIL	LITY(BBLS) ASPHALT
			MEDIUM FACILITIES		
32P	825	R/S	<b>385,0</b> 00		
219L	200	R	350,000		
187H	440	R/S	309,500		
266P	305	R/S	306,000		
276P	315	R	293,000		
135C	800	R	291,000		
265P	225	R	275,000		
170H	1,860	R/S	267,000		
201L	490	R	256,000		
272P	300	R	250,000		
31P	155	R	250,000		
138C	120	R	250,000		
129L	375	R/S	250,000		
47P	441	R/S	240,000		
168L	360	R	240,000		
249P	1,315	R	230,000		
101C	150	R	220,000		
132C	400	R/S	214,000		
18C	450	R	210,000		
135L	220	R/S	203,000		
149L	400	R	203,000		
169L	195	R/S	201,000		
278P	450	R/S	200,000		
156C	850	R	200,000		
19C	250	R	200,000		
95C	150	R	145,000		
141H	170	Ŕ	143,000		
241H	195	R	143,000		
188L	1,960	R	143,000		
172C	195	R	142,500		
118L	195	R	140,000		
57L	175	R	140,000		
54C	400	R	137,000		
239L	175	R/S	120,000		
188H	425	R	119,000		
99L	600	Ŕ	118,000		
125L	190	R	115,000		
183H	120	R	110,000	177 000	
216H	465	R		175,000	
151C	380	R			214,200
195H	320	R			140,00
rage:	437		210,763	175,000	177,100
otal:	17,916		8,009,000	175,000	354,20

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
277P	300	x	200 000	
116C	40	R	300,000	
103L	135	R	114,000	
147 <u>L</u>	175	R	112,000	
221H	195	R	110,000 106,000	
123C	195	R	105,000	
200L	300	R	100,000	
136H	140	R	95,200	
42C	150	S	88,000	
2L	300	R/S	85,900	
16H	195	R	80,000	
110H	200	R	71,400	
220H	160	R	68,200	
231H	185	R	67,000	110,000
223H	350	R	67,000	
34P	243	R	65,000	
217H	210	R	65,000	
215H	90	R	65,000	
142H	160	R	60,000	
239H	195	R	58,000	
12H	195	X	52,400	
193H	4,000	R	52,400	
109C	150	R	52,400	
156H	200	R	50,400	
64H	800	R	47,600	
18H	380	R	47,600	
.24H	195	R	47,600	
.33H .17L	165	R	47,600	
9H	150	R/S	46,900	
81C	195	R	45,250	
92H	200	R	45,000	
01L	1,245	S	40,500	
26H	150	R	40,000	
29C	330	R	35,000	
23C	200	R	32,300	
78L	195	R	30,950	
22H	200 200	R	30,000	
88L	200 1 <b>95</b>	R	28, <del>6</del> 00	
- <b></b>		R R	28,600	
54H			44	
54H 9P	125 800		28,500	
9P	800	R	28,500 26,000	
			•	

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTI PETROLEUM PRODUCTS	ED TO BARGE FAC CRUDE OIL	ILITY (BBLS) ASPHALT
<del></del>		<del>_</del>	MINOR FACILITIES	(continued)	
147C	195	R	23,800		
97L	170	R	23,800		
161C	175	R	20,200		
224H	160	R	20,000		
128H	125	R	19,000		
152H	120	R	17,600		
131L	200	R/S	11,000		
166H	140	S	10,700		
57P	200	S	10,000		
50P	129	R/S	6,000		
118H	240	R	3,530		
230H	165	R		98,700	
219H	150	R		45,000	
222H	150	R		23,800	
142L	250	R			93,000
124L	180	R			80,000
145L	200	R			66,000
51C	175	S			47,600
16C	400	x			
erage:	292		54,101	55,833	79, 320
Total:	18,402		2,975,530	167,500	396,600
			ALL FACILITIES		
erage:	348		195,083	354,357	369,067
otal:	43,187		20,873,930	2,480,500	4,428,800

Date: 8/09/88

## SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: OUACHITA RIVER

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MINOR FACILITIES	
10 8	195 480	X R	186,800 125,000	
16	450	x	125,000	24,000
5	400	х		20,000
Average:	381		155,900	22,000
Total:	1,525		311,800	44,000
			ALL FACILITIES	
Average:	381		155,900	22,000
Total:	1,525		311,800	44,000

Date: 9/22/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

## WATERWAY: TENNESSEE RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE CONNECTED PETROLEUM PRODUCTS	TO BARGE FACILITY (BBLS) CRUDE OIL ASPHALT
			MEDIUM FACILITIES	
145 32 64 7 85	120 727 4,130 175 650	R R/S R R R	480,000 215,000 214,300 179,000 164,300	98,000
21 8 66	200 100 90	R/S R R	158,000 158,000 115,000	
191 144 152	295 425 195	R R/S R	53,500	95,200 150,000 92,000
Average:	646		193,011	108,800
Total:	7,107		1,737,100	435,200
			MINOR FACILITIES	
190 24 187 131 11	240 195 350 390 200 460	X X X R R	141,800 :35,000 104,000 95,200 63,400 54,800	
49 153 67 55	195 150 600	R R X R	23,800 13,000	75,000
Average:	309		78,875	75,000
Total:	2,780		631,000	75,000
		•	ALL FACILITIES	
Average:	494		139,300	102,040
Total:	9,887		2,368,100	510,200

Date: 8/09/88

SUMMARY OF PETROLEUM-HANDLING BARGE FACILITIES

WATERWAY: TENNESSEE-TOMBIGBEE WATERWAY

REF. BERTHING RECEIPT TANKAGE CONNECTED TO BARGE FACILITY (BBLS) NO. LENGTH AND/OR (FT) SHIPMENT PETROLEUM CRUDE OIL ASPHALT

PRODUCTS

MEDIUM FACILITIES

1 360 R 195,000 Average: 360 195,000

360 Total: 195,000

ALL FACILITIES

Average: 360 195,000

Total: 360 195,000



# DRY BULK MATERIAL HANDLING TERMINALS

This commodity category is subdivided into 9 sub-categories: Cement; Feed, Meal, Flour, and Other Related Items; Fertilizer/Fertilizer Component; Sand, Gravel, Stone, and Related Items; Scap Metal; Miscellaneous Ores (alumina, pig iron, magnetite, etc.); Sugar; Salt; and Miscellaneous (unspecified, wood chips, fish meal, waste products, etc.). Each entry is arranged according to descending berthing length.

Transfer rates between barge and truck, rail, and/or open and covered storage areas are given where available.

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

WATERWAY: ALABAMA RIVER

	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		· - · - · · - · · · · · · · · · ·	Total Stora (ton Open C		Acres
		FERT	'ILIZ <b>E</b> R	/FERTILIZER COMPONENT	<u>'S</u>		
113	100			120		20,000	
Avg.	100			120		20,000	
Tot.	100					20,000	
			SAND,	STONE AND GRAVEL	·		
					40.000		
98 110	600 200	1,000 400			40,000 100,000		
108	200	400			100,000		1.0
106	135	560			500,000		
105	100	400			550,000		
Avg.	247	590			297,500		1
Tot.	1,235				1,190,000		1.0
		***************************************	MISCEL	LANEOUS BULK CARGO			
114	650						
109	325						
102	110	60					
115	90			450	200,000		
Avg.	294	60		450	200,000		
Tot.	1,175				200,000		
			A	LL FACILITIES			
Avg.	251	484		285	278,000	20,000	1.0
Tot.	2,510				1,390,000	20,000	1.0

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: ALLEGHENY RIVER

Ref.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck	Rail	Unloading rate (Tons/Hr) From Barge to Storage Truck Rail	Total Storac (ton: Open C		Acres
			SAND,	STONE AND GRAVEL	<u> </u>		
217	870				18,000		
223	800				120,000		
216	700				300,000		
243	490						
215	350				80,000		
209	350				35,000		
222	350						
235	200			100	8,000		
239	200				4,000		
226	175	250					
221	175				200,000		
Avg.	424	250		100	95, 625		
Tot.	4,660				765,000		
			MISCEL	LANEOUS BULK CARGO			
					_		
230	705						45.0
219	500				15,000		
227	400				100,000		
218	350						12.5
231	195						5.0
238	175					1,475	
Avg.	388			<del></del>	57,500	1,475	21
Tot.	2,325				115,000	1,475	62.5
			A	LL FACILITIES	· <del></del>		<b></b>
Avq.	411	250		100	88,000	1,475	20.8
••••	7-4				55,500	-,-,-	
Tot.	6, 985				880,000	1,475	62.5

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: APALACHICOLA, CHATTAHOOCHEE, AND FLINT RIVERS

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloadin (Bu/H From Bar Storage	r)	Total Stora (tor Open		Acres
		FERT	ILIZER	FERTILIZE	R COMPONENT	<u>s</u>		
10 18	•				110 100	13,000	67,000 56,000	
Avg.	4,758				105	13,000	61,500	
Tot.	9,516					13,000	123,000	
		<u></u>	MISC	ELLANEOUS	ORES			
19	354							112.0
Avg.	354							112
Tot.	354							112.0
			SAND,	STONE AND	CDAVE			
18	E16		JANU,		GLAND	_ 20,000		
7				500 100		500,000		
22	175	200				100,000		
Avg.	289	200		300		206,667		
Tot.	866		·			620,000		
			MISCELI	LANEOUS BU	LK CARGO	<del></del>		
6	300			200		5,000	38,000	8.0
Avg.	300			200		5,000	38,000	8
Tot.	300					5,000	38,000	8.0
<b>-</b> ·			<u>A</u> I	L FACILIT	ies		<b></b>	
Avg.	1,577	200		267	105	127,600	53,667	60.0
Tot.	11,036					638,000	161,000	120.0

# Date: 10,18/88 SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

(excluding coal)

WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (McCLELLAN-KERR - ARKANSAS RIVER
NAUTCATION GYORDS)

Ref. No.	Berth Length (ft)		Unload (To From B	ing rate ns/Hr) arge to e Truck Rail	Total Storage (tons) Open Cove	Capy red Acre
			CEMEN	T		<del></del>
34	150		80		3	, 400
Avg.	150	····	80		3	, 400
Tot.	150					,400
				FLOUR, ETC.		
5 <b>9</b>	380	-	110		4	, 000
Avg.	380		110		4	,000
Tot.	380				4	,000
		FERT	ILIZER/FERTILI	ZER COMPONENT	<u>'\$</u>	
33	930					3
37	600		900			
14	540		200			,000
98	375	150	150			,000
85	260		200	050	30	,000
38 39	200 200		800	250	26	,000
33	200		800		20	, 000
Avg.	429	150	450	250	36	,500
rot.	3,005				146	,000 3
			SAND, STONE A	ND GRAVEL	<u>-</u>	
54	1,600	1,000			30	,000
62	800	•	500			,000
49	525					,000
58	350		350			,000
42	300		1,000		50	,000
35	195	E00				
55 46	195 195	500	350		40	, 000
57	175		220		40	, 000
72	100		100		86	, 300
Avg.	444	750	460		60	, 900
Tot.	4,435				426	5,300

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)

## WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (McCLELLAN-KERR - ARKANSAS RIVER NAVIGATION SYSTEM) Loading rate Unloading rate

Ref. No.	Berth Length (ft)	Loading ra (Tons/H To Barge f Storage Tr	ir) From	From Ba	s/Hr)		age Capy ns) Covered	Acres
			MISCEL	Laneous B	ULK CARGO	<del></del>		
33	830							18.0
75	700							
52	600							12.0
91	400		400					
43	350 3 <b>4</b> 0							100
80 92	295				130	12 000		10.0
63	295				130	12,000		
74	200							
86	200	250				20,000		
87	200	-50				20,000		
93	180							8.0
53	120							
Avg.	355	250	400		130	16,000		12
Tot.	4,620					32,000		48.0
			<u>A</u>	LL FACILI	TIES			
Avg.	393	583	275	395	190	16,000	44,592	10.2
Tot.	12,590					32,000	579,700	51.0

Date: 10/03/88

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: BLACK WARRIOR-TOMBIGBEE-MOBILE RIVERS (BLACK WARRIOR RIVER SYSTEM)

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage (tons) Open Co		Acres
				CEMENT	-		
49	390	1,200				5,500	
Avg.	390	1,200	······································			5,500	
Tot.	390					5,500	
		FERT	'ILIZER/	FERTILIZER COMPONENT	<u>:s</u>		
21	210			250	2	0,000	
Avg.	210			250	2	0,000	
Tot.	210	~~~~~~~				0,000	
			MISC	ELLANEOUS ORES			
73	800		600		200,000		
Avg.	800		600		200,000		
Tot.	800				200,000		<b>-</b>
				SALT	_		
45	600			150			
Avg.	600			150	<del></del>		
Tot.	600						
		·	SAND,	STONE AND GRAVEL	_		
33	1,510						
41 76	500 400	1 150		250	100,000		
24	200	1,150					14.0
Avg.	653	1,150		250	100,000		14
Tot.	2,610				100,000		14.0

Date: 10/03/88

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)

WATERWAY: BLACK WARRIOR-TOMBIGBEE-MOBILE RIVERS (BLACK WARRIOR RIVER SYSTEM)

Loading rate

Unloading rate (Bu/Hr) Total Storage Capy

Ref. Berth (Bu/Hr) (Bu/Hr)
No. Length To Barge from From Barge to
Storage Truck Rail Storage Truck Rail (tons) Open Covered Acres

			<del></del>			
			MISCEL	LANEOUS BULK CARGO		
53	600				24,000	
71	600					
23	498					
52	200	500			40,000	
lvg.	475	500			32,000	
ot.	1,898				64,000	
						- <b></b>
			A.	LL FACILITIES		

Avg. 542 850 1,150 600 217 91,000 12,750 14.0 Tot. 6,508 364,000 25,500 14.0

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: COLUMBIA RIVER (ABOVE THE DALLES - MILE 191.5)

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Unloading rate (Bu/Hr) From Barge to Rail Storage Truck Rail	Total Storage Capy (tons) Open Covered Acres
			WOOD CHIPS	
112	800	90		2,400
145	400	240		3,000
144	375	140		10,000
108	300	250		29,000
150	200	180		5,400
Avg.	415	180		9,960
Tot.	2,075			49 800

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: CUMBERLAND RIVER

Ref.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck	Rail	Unloading rate (Tons/Hr) From Barge to Storage Truck Rail		age Capy ns) Covered	Acres
				CEMENT			
21 18	600 200			350 100		54,000 5,800	
26				200		4,200	
Avg.	320			217		21,333	· · · · · ·
Tot.	960					64,000	
			MISC	ELLANEOUS ORES			
16	550			300		15,000	
Avg.	550		<del></del>	300	<del></del>	15,000	
Tot.	550					15,000	
			SAND,	STONE AND GRAVEL	_		
36	360			750	100,000	•	
44	200			325	26,000		
Avg.	280			538	63,000		
Tot.	560				126,000		
				CRAP METAL	_		
34	260	350					30.0
Avg.	260	350					30
Tot.	260				.====		30.0
			s	CRAP METAL	_		
33	300	75			1,400	1	
Avg.	300	75			1,400		
Tot.	300				1,400	1	

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: CUMBERLAND RIVER

Ref. No.	Length	Loading (Tons To Barge Storage	/Hr) e from		Unloading rat (Tons/Hr) From Barge to Storage Truck		·	ns)	
				MISCELL	ANEOUS BULK CA	RGO	_		
47 42	1,570 800	1,500	750						5.0 10.0
49	690	1,500	1,500				1,000,000		
38	195				200		20,000		
23	100								7.0
Avg.	671	1,500	1,125		200		510,000		7
Tot.	3,355						1,020,000		22.0
				AL	L FACILITIES				
Avg.	160	856	1,125		318		229,480	19,750	13.0
Tot.	5,985						1,147,400	79,000	52.0

Date: 9/02/88

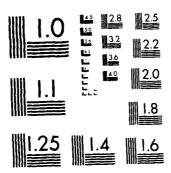
150,000 75,000

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: GREEN RIVER

Tot. 5,430

	Loading rate		Unloading rate			
(ft)	(Tons/Hr) To Barge from Storage Truck	Rail	(Tons/Hr) From Barge to	Total Stora (ton Open C	ເສ)	Acres
		MISC	CELLANEOUS ORES	<del></del>		
1,440					51,000	
1,440					51,000	
1,440					51,000	
		SAND	, STONE, GRAVEL, LIME	<u>1</u>		
2,625 1,365	<b>4</b> 00 1,000			150,000	24,000	
1,995	700			150,000	24,000	<del> </del>
3,990				150,000	24,000	
		<u></u>	LL FACILITIES			
1,810	700			150,000	37,500	
	1,440 1,440 1,440 2,625 1,365 1,995 3,990	1,440 1,440 1,440 2,625 400 1,365 1,000 1,995 700 3,990	1,440  1,440  1,440  2,625 400 1,365 1,000  1,995 700 3,990	### MISCELLANEOUS ORES  1,440  1,440  1,440  SAND, STONE, GRAVEL, LIME  2,625 400 1,365 1,000  1,995 700  3,990  ALL FACILITIES	MISCELLANEOUS ORES  1,440  1,440  SAND, STONE, GRAVEL, LIME  2,625 400 1,365 1,000  1,995 700  ALL FACILITIES	1,440 51,000 1,440 51,000 1,440 51,000  SAND, STONE, GRAVEL, LIME  2,625 400 1,365 1,000 24,000 1,995 700 150,000 24,000 3,990 150,000 24,000

SUMMARY OF COMMODITY HANDLING TERMINALS ON UNITED STATES INLAND WATERWAYS (U) HAVIGATION DATA CENTER FORT BELUGIR UA OCT 88 NDC-88-P-1 AD-A207 483 2/2 UNCLASSIFIED F/G 15/5 NL 8



MICROCOPY RESOLUTION TEST CHART NATIONAL BURLAL OF STANDARD 1963 A

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: GULF INTRACOASTAL WATERWAY (EAST END TO MILE 5W)

	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Store (to		
				CEMENT			
92	600					58,500	
Avg.	600					58,500	
Tot.	600					58,500	
			SAND,	STONE AND GRAVEL	_		
80	1,300			100	75,000		
Avg.	1,300			100	75,000		
Tot.	1,300				75,000		
				SCRAP METAL	_		
28	451						4.0
Avg.	451						4
Tot.	451						4.0
			MISCEL	LANEOUS BULK CARGO	_		
51	1,808	3,000		1,200		30,000	5.4
Avg.	1,808	3,000	<del></del>	1,200		30,000	
Tot.	1,808					30,000	5.4
				LL FACILITIES			
7	1 040	3 000	•		75 000	44 250	4.7
_	·	3,000		650	75,000		
Tot.	4,159				75,000	88,500	9.4

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

WATERWAY: KANAWHA RIVER

Ref.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck		From Ban	s/Hr)	Total Stora (tor L Open (		Acres
				CEMENT		_		
37	276			120			11,700	
Avg.	276			120			11,700	
Tot.	276						11,700	
			SAND.	STONE AND	GRAVEL			
39	800			250		20,000		
25	750			200		60,000		
51	560			200		10,000		
24	525			400		20,000		
99	525			250		20,000		
28	420			200		21,500		40.0
54	400			300		13,000		
85	350			300		30,000		
91	300			300		60,000		
27	200			175		20,000		
20	200			150		10,000		
42	195			300		43,000		
84	195							30.0
73	175				375	18,000		
Avg.	400			252	375	26,577		35
Tot.	5,595 					345,500		70.0
		<del></del>	s	CRAP MET	AL.			
97	195							23.0
61	195							15.0
Āvģ.	195	<del> </del>		<u>-</u>				19
Tot.	390							38.0
			AI,	L FACILI	<u> Ties</u>			
Avg.	368			242	375	26,577	11,700	27.0
Tot.	6,261					345,500	11,700	108.0

Date: 10/07/88

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: KASKASKIA RIVER

Ref. No.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck R	Unloading rate (Tons/Hr) From Barge to Rail Storage Truck Rail	Total Storage Capy (tons) Open Covered	Acres
		мі	ISCELLANEOUS BULK CARGO		
0	195	300			5.0
Avg.	195	300			5
Tot.	195				5.0
			ALL FACILITIES		
Avg.	195	300			5.0
Tot.	195				5.0

Date: 8/30/88

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: KENTUCKY RIVER

Ref. No.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck		Unloading rate (Tons/Hr) From Barge to Storage Truck Rail	(1	orage Capy tons) Covered	
			SAND,	STONE AND GRAVEL	_		
<b>4</b> 2 5	135 700 200			300	5,0	00	20.0 4.0
Avg.	345	<del></del>	<del></del>	300	5,0	00	12
Tot.	1,035				5,0	00	24.0
			A	LL FACILITIES			
Avg.	345			300	5,0	00	12.0
Tot.	1,035				5,0	00	24.0

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal) ILLINOIS RIVER (INCLUDING BARGE FACILITIES AT THE PORT OF WATERWAY: CHICAGO) Loading rate Unloading rate Total Storage Capy Ref. Berth (Bu/Hr) (Bu/Hr) From Barge to To Barge from No. Length (tons) Storage Truck Rail Storage Truck Rail Open Covered Acres (ft) CEMENT 88 800 140 5,500 21,400 30,000 750 162 78 480 220 4,100 130 310 1,880 200 71 222 25,500 21 217 200 190 14,730 463 Avg. Tot. 2,779 88,380 FEED, MEAL, FLOUR, ETC. 82 430 11,000 33,500 15,500 24 360 275 196 Avg. 395 275 20,000 790 Tot. 60,000 FERTILIZER/FERTILIZER COMPONENTS 31 1,200 22,500 1,070 94 70 20,000 4 1,040 1,200 600 600 600 60,000 92 80,000 875 1,000 1,000 1,000 800 800 800 131 800 150 150 150 80,000 196 720 30,000 11,000 82 430 136 400 20,000 135 200 20,000 95 170 100 16,000 Avg. 691 1,100 1,000 1,000 344 517 517 35,950 Tot. 6,905 359,500 MISCELLANEOUS ORES 185 730 5.0 720 194 7.0 138 500 6.0 214 148 200 1.5 5 541 200 Avq. 19.5 Tot. 2,164

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

Loading rate   Church (Bu/Hr) (Bu/Hr)   Church (Bu/Hr)	,	WATERWAY	: IL	LINOIS		xcluding (INCLUDIN			LITIES AT TE	E PORT	of
No. Length To Barge from (ft) Storage Truck Rail Storage Truck Rail Open Covered Acr    SALT						Unloadi	ng rat	e .			
SALT	Ref.		• •	-					Total Store	age Capy	
SALT	No.	Length					rge to		(tor	າຣ)	
61 2,400 103 2,300 161 1,500 4 1,040 1,200 600 600 600 35,000 186 1,020 400 200,000 19,000 166 690 250 50,000 5,000 16 532 250 50,000 5,000 16 532 25,000 16 500 25,000 34 425 200 7,000 8,000 34 425 200 16,500  Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000   SAND, STONE AND GRAVEL  120 10,600 700 61 2,400 103 2,300 199 1,500 112 1,400 500 121 1,400 500 124 1,125 240 30,000 14 1,125 240 30,000 14 1,125 240 30,000 14 1,125 240 30,000 14 1,125 240 30,000 15 1,000 29 906 240 19,000 41 872 100,000 18 180 400 80,000 199 160 151 610 400 80,000 126 500 25,000 127 160 400 80,000 128 465 200 20,000 140 700 150 100 100 000 160 195 40,000 10,000 10,000 10,000 11,100 1,100 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000		(ft)	Storage	Truck	Rail	Storage	Truck	Rail	Open (	Covered	Acres
61 2,400 103 2,300 161 1,500 4 1,040 1,200 600 600 600 35,000 186 1,020 400 200,000 19,000 186 1,020 400 200,000 19,000 166 690 250 50,000 5,000 16 532 250 50,000 5,000 16 500 25,000 16 500 25,000 34 425 200 7,000 8,000 34 425 200 16,500  Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000   SAND, STONE AND GRAVEL  120 10,600 700 14 1,125 240 30,000 25,000 199 1,500 112 1,400 500 20,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 14 1,125 240 30,000 25,000 158 1,000 29 906 240 19,000 29 906 240 19,000 29 906 240 19,000 29 906 240 19,000 29 40 70 119 660 51 610 400 80,000 126 500 25,000 28 465 200 20,000 84 400 180 43 350 69 347 107 300 1,100 1,100 40 300 60 195 40,000						SALT	<u> </u>				
103 2,300 161 1,500 4 1,040 1,200 600 600 600 35,000 186 1,020 400 200,000 19,000 166 690 250 50,000 5,000 166 690 250 50,000 5,000 166 532 25,000 126 500 25,000 34 425 200 7,000 8,000 34 425 200 1,000,000 34 425 200 16,500  Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000   SAND, STONE AND GRAVEL  120 10,600 700 61 2,400 100,000 103 2,300 112 1,400 500 20,000 114 1,125 240 30,000 25,000 129 1,500 112 1,400 500 70 114 1,125 240 30,000 25,000 129 4,000 13 1,000 14 1,000 500 15,000 15 1,000 16 50 10,000 15,000 17 100,000 18 1 872 100,000 194 720 196 660 51 610 400 80,000 196 650 25,000 28 465 200 20,000 84 400 180 33 50 69 347 107 300 1,100 1,100 40 300 60 195 40,000	61	2 400							100 000		
161 1,500 4 1,040 1,200 600 600 35,000 186 1,020 400 200,000 19,000 131 800 150 12,000 16 532 250 50,000 5,000 16 532 25,000 6 500 25,000 1,000,000 34 425 200 7,000 8,000 34 425 200 16,500  Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000  SAND, STONE AND GRAVEL  120 10,600 700 61 2,400 100,000 112 1,400 500 20,000 14 1,125 240 30,000 25,000 14 1,000 70 15,000 12 1,400 500 15,000 14 1,070 70 15,000 15 1,000 29 906 240 19,000 14 872 100,000 15 650 25,000 194 720 119 660 51 610 400 80,000 28 465 200 20,000 84 400 180 33 350 69 347 107 300 1,100 1,100 40 300 60 195 400 10,000									100,000		6.
## 1,040		•							125 000		0.
186 1,020			1 200			600	600	600	•		
131 800 150 12,000 5,000 166 690 250 50,000 5,000 25,000 16 532 250 7,000 8,000 126 500 25,000 1,000,000 34 425 200 16,500 1,000,000 34 425 200 16,500 16,500 200 16,500 200 16,500 200 16,500 200 200 20,000	_		1,200				000	-		19 000	
166 690 250 50,000 5,000 16 532 25,000 16 532 25,000 25,000 8,000 126 500 25,000 1,000,000 1,000,000 16,500									•	23,000	
16 532										5.000	
22 518 200 7,000 8,000 25,000 25,000 34 425 200 1,000,000 16,500 1,000,000 16,500 200 16,500 200 16,500 200 200 20,000 200 25,000 200 20,000 25,000 20 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 25,000 20,000 20,000 25,000 20,00									20,000		
126 500						200			7.000		
1,000,000 34 425  200  1,000,000 16,500  Avg. 1,019 1,200  300 600 600 157,050 14,250  Tot. 12,225  1,570,500 57,000    SAND, STONE AND GRAVEL   120 10,600 700 61 2,400 103 2,300 199 1,500 112 1,400 500 14 1,125 240 30,000 25,000 94 1,070 70 15,000 58 1,000 29 906 240 19,000 41 872 100,000 194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 25,000 28 465 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195  10,000									•	,,,,,,	
34 425 200 16,500  Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000     SAND, STONE AND GRAVEL	6										
Avg. 1,019 1,200 300 600 600 157,050 14,250  Tot. 12,225 1,570,500 57,000    SAND, STONE AND GRAVEL	34					200			, ,		
Tot. 12,225	A	1 010	1 200			300	600	600		14 250	
SAND, STONE AND GRAVEL   120 10,600   700   61 2,400   100,000   103 2,300   121 1,400   500   20,000   14 1,125   240   30,000   25,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   160	-	•	1,200			300	800	600	·	·	
120 10,600 700 61 2,400 103 2,300 199 1,500 112 1,400 500 14 1,125 240 30,000 25,000 94 1,070 70 15,000  58 1,000 29 906 240 19,000 41 872 100,000 194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195 10,000	Tot.	12,225 	<b>-</b> -					<b>-</b> -	1,570,500	57,000	6. 
120 10,600 700 61 2,400 103 2,300 199 1,500 112 1,400 500 14 1,125 240 30,000 25,000 94 1,070 70 15,000  58 1,000 29 906 240 19,000 41 872 100,000 194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195 100,000					CAND	GMONTH AND	D (CD 317				
61 2,400 103 2,300 199 1,500 112 1,400 500 14 1,125 240 30,000 25,000 94 1,070 70 15,000  29 906 240 19,000 41 872 100,000  194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195					SAND,	STONE AN	D GRANA	<u> </u>	-		
103			700								47.
199       1,500         112       1,400       500       20,000         14       1,125       240       30,000       25,000         94       1,070       70       15,000         58       1,000       19,000       15,000         29       906       240       19,000       100,000         41       872       100,000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>100,000</td><td></td><td>_</td></t<>									100,000		_
112     1,400     500     20,000       14     1,125     240     30,000     25,000       94     1,070     70     15,000       58     1,000     19,000       29     906     240     19,000       41     872     100,000       194     720     70     70       119     660     660     80,000       51     610     400     80,000       28     465     200     25,000       28     465     200     20,000       84     400     180     50,000       43     350     50,000       69     347     107     300     1,100     1,100       40     300     1,000     40,000	_	•									6.
14       1,125       240       30,000       25,000         94       1,070       70       15,000         58       1,000       19,000         29       906       240       19,000         41       872       100,000         194       720       19       660         51       610       400       80,000         28       465       200       25,000         28       465       200       20,000         84       400       180       50,000         43       350       50,000         69       347       107       300       1,100       1,100         40       300       1,100       1,100       10,000         60       195       40,000       40,000					EAA				20 000		7.
94     1,070     70     15,000       58     1,000     19,000     19,000       29     906     240     19,000       41     872     100,000       194     720     119     660       51     610     400     80,000       126     500     25,000       28     465     200     20,000       84     400     180       43     350     50,000       69     347       107     300     1,100     1,100       40     300     10,000       60     195     40,000					500	240				25 000	
58       1,000         29       906       240       19,000         41       872       100,000         194       720       119       660         51       610       400       80,000         126       500       25,000         28       465       200       20,000         84       400       180       50,000         69       347       50,000       10,000         40       300       1,100       1,100       10,000         60       195       40,000       40,000									30,000	-	
29     906     240     19,000       41     872     100,000       194     720       119     660       51     610     400     80,000       126     500     25,000       28     465     200     20,000       84     400     180       43     350     50,000       69     347       107     300     1,100     1,100       40     300     10,000       60     195     40,000						70				13,000	1.
41 872 194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195 100,000						240			19 000		1.
194 720 119 660 51 610 400 80,000 126 500 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 60 195 10,000	_					240					
119 660 51 610 400 80,000 126 500 25,000 28 465 200 20,000 84 400 180 43 350 69 347 107 300 1,100 1,100 40 300 60 195 10,000		-							200,000		1.
51     610     400     80,000       126     500     25,000       28     465     200     20,000       84     400     180       43     350     50,000       69     347       107     300     1,100     1,100       40     300     10,000       60     195     40,000											
126 500 25,000 28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 10,000 60 195 40,000						400			80.000		
28 465 200 20,000 84 400 180 43 350 50,000 69 347 107 300 1,100 1,100 40 300 10,000 60 195 40,000											
84 400 180 43 350 69 347 107 300 1,100 1,100 40 300 60 195 10,000						200					
43 350 50,000 69 347 107 300 1,100 1,100 40 300 10,000 60 195 40,000				180					= - , - 3 •		
69 347 107 300 1,100 1,100 40 300 10,000 60 195 40,000	43	350							50,000		
40 300 10,000 60 195 40,000	69	347							,		2.
60 195 40,000				1,100	1,100						
Avg. 1,334 700 640 800 230 44,909 20,000	60	195							40,000		
	Avg.	1,334	700	640	800	230			44,909	20,000	1

494,000 40,000 64.0

Tot. 28,020

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)
ILLINOIS RIVER (INCLUDING BARGE FACILITIES AT THE PORT OF WATERWAY:

CHICAGO)

Loading rate

Ref. Berth

No. Length
(ft)

Storage Truck

Unloading rate

Unloading rate

Unloading rate

(Bu/Hr)

(Bu/Hr)

Total Storage Capy

(tons)

(tons)

Covered Acres

					RAP MET	AL	<u></u>			
152	1,430									10.0
76	1,300							50,000		_
180	1,300									. 5
91	1,140									2.0
43	1,089									5.0
50	659									2.5
17	654									2.0
128 26	520 480									4.0
183	330									7.0
_										
vg.	890							50,000		4
ot.	8,902							50,000		35.0
					SUGAR					
48	1,770								15,000	
vg.	1,770					<del></del>			15,000	
_									15,000	
ot.	1,770					_		<b></b>		
				MISCELLI	NEOUS B	ULK CAR	GO			
179	1,582								00 500	8.0
31	1,200							1 500	22,500	14.0
118	1,000					0.50		1,500		
143	1,000				250	250		50,000		4 5
127	1,000									4.5
78	1,000				150	150	150	99 000		1.5
131	800		1 500		150	150	150	88,000		25.0
54	650 600		1,500							17.0
160	580		150					50,000		2,
160			150					50,000		
104	500							30,000		
104 104	580 400									
104 104 103	400									50.0
104 104 103 57	400 400							10.000		50.0
104 104 103 57 5	400 400 400							10,000 150,000		50.0
104 104 103 57	400 400							10,000 150,000		50.0
104 104 103 57 5 108	400 400 400 285									50.0
104 104 103 57 5 108 18	400 400 400 285 250							150,000		50.0
104 104 103 57 5 108 18	400 400 400 285 250 200	1,000	1,000	1,000	800	800	800			50.0
104 104 103 57 5 108 18 144 42	400 400 400 285 250 200		1,000		800	800	800	150,000	22,500	50.0

SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)

WATERWAY: ILLINOIS RIVER (INCLUDING BARGE FACILITIES AT THE PORT OF

CHICAGO)

Loading rate
Ref. Berth (Bu/Hr)
No. Length To Barge from Unloading rate (Bu/Hr)

Total Storage Capy (tons)

Length To Barge from From Barge to
(ft) Storage Truck Rail Storage Truck Rail Open Covered Acres

ALL FACILITIES

Avg. 901 896 822 900 285 479 517 87,133 23,792

Tot. 75,677 2,614,000 642,380 244.5

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)

WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE TO CAIRO)

•	MAIBINAI		MIN MIS	SISSIEEL RIVER (BAIOL	1 10000	io carrio,	
Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail		Storage Capy (tons) Open Covered	Acres
				CEMENT	_		
11 43	355 175					8,100 2,100	
Avg.	265					5,100	
Tot.	530					10,200	
				FERTILIZER			
17	5,280						
105	1,080	300		300		30,000	
95 126	780 700			300		10,000 12,000	
126	390	200		200		30,000	
64	281	200		200		24,000	
86	135					5,800	
40	120					14,000	
61	100					50,000	
Āvg.	985	250		267		21,975	
Tot.	8,866					175,800	
			SA	ND, GRAVEL AND STONE			
59	1,000					500,000	
89	450					300,000	5.4
99	250					200,000	J. 4
60	110					50,000	
38	100					,	5.4
72	100					120,000	
Avg.	335		<del></del>			217,500	5
Tot.	2,010					879,000	10.8

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding cost)

(excluding coal)
WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE TO CAIRO)

Ref.	Berth Length (ft)		Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Storage Capy (tons) Open Covered	Acres
			MISCEL	LANEOUS BULK CARGO		
91	1,740			200	74,000	
109	600	170			15,000	
89	600				/	
99	530					15.0
110	500				40,000	
2	495				560,000	
70	380					1.6
47	360				22	15.0
116	314				75,000	15 0
56 66	300 300	400		400	21 000	15.0
64	281	400		400	21,000 50,000	15.0
54	260			140	150,000	15.0
29	250			140	130,000	15.0
85	250					.5
113	250					6.0
27	195			200		24.0
48	160			_,_		15.0
46	100					
Avg.	414	285		235	 123,125	12
Tot.	7,865				 985,000	122.1
			AL	L FACILITIES		
Avg.	535	268		249	92,773	11.1
Tot.	19,271				2041000	132.9

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO TO MISSOURI RIVER)

Ref.	Borth Longth	Loading rate (Tons/Hr) To Barge from	(Tons,	ing rate /Hr) arge to		orage Capy tons)	
. NO	(ft)	Storage Truck	Rail Storage	e Truck Rail		Covered	Acres
			CEMEN	r	_		
166	1,000	1,000				18,000	
149		400				37,000	
81			60			100,000	
111			250			20,500	
91			125			10,500	
120	150		140			10,400	
Avg.	472	700	144			32,733	
rot.	2,830		~~~~~~~~~~			196,400	
		<del></del>	FEED, MEAL,	FLOUR, ETC.			
124	165		23			500	
Avg.	165		23			500	
Tot.	165					500	
		FERT	ILIZER/FERTILI:	ZER COMPONENT	<u>:8</u>		
30	400	275				40,000	
135	395		180			40,000	
Āvg.	398	275	180			40,000	
rot.	795					80,000	
			SALT				
18	600				10.000	6,500	
96			150		10,000	10,000	
126			130	400		10,000	
Avg.	398		150	400	10,000	8,250	
Tot.	795				10,000	16,500	

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO TO MISSOURI RIVER)

Ref. No.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck		Unloadi (Tons/ From Ba Storage	Hr) rge to		(1	orage Capy tons) Covered	Acres
			ŞAND,	STONE AN	D GRAV	EL	_	_	
159		300		300			60,000		
146		750		250			80 000		
28 148				250 200			80,000 36,000		
126				400			23,000		
96				150			10,000		
145									
139			450						
153 157			450						
90				400			100,000		
138	130			150			15,000		
Avg.	272	525	450	264			46,286		
Tot.	3,265					_	324,000		
				CVC LD					
				SUGAR			<del>-</del>		
110	310			275				12,000	
Avg.	310			275				12,000	
Tot.	310							12,000	
			WT COW!			<b>5</b>			
			WISCETT	LANEOUS E	SULLA CA	RGU	_		
5							10,000		4.0
89								21,000	12.0
88 31									
18				500	500				
33	600		750						
167									
152 135		1,500							15.0
38		300							
22		300					140,000		
32	195	350	350		350	350			
Avg.	611	300 925	550	500	425	350	75,000	21,000	10
Tot.	7,335						150,000	21,000	31.0
***									
			<u>Al</u>	LL FACILI	LTIES				
Avg.	430	504 925	517	222	417	350	48,400	25,108	10.3
Tot.	15,495						484,000	326,400	31.0

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)
WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

	Berth Length (ft)	To Barge from	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage (tons) Open Co	• •	Acres
				CEMENT	•		
208	919				10	00,000	
254	720	1,200				54,500	
71	260	-/				5,100	
69	250	1,500			8	34,000	
195	245	·		160	1	10,500	
Avg.	479	1,350		160		52,820	
Tot.	2,394				26	54,100	
			FERI	o, MEAL, FLOUR, ETC.			
_							
4	692	500		150			
179	450			150			
Āvg.	571	500		150	·		<del></del>
Tot.	1,142						
		<del></del>		TERTILIZER			
232	2,000			500		00,000	
31	1,200			1 7 5	:	50,000	
13 2 <b>4</b> 7	1,000 880			175 <b>4</b> 50			
23	600			450	21	00,000	
138	600					,	
20	400			200		50,000	
178	285			150		41,000	
224	200			150		21,500	
137 160	200 195			350		00,000 50,000	
119						13,000	
Avg.	646			282		91,722	
Tot.	7,755				8:	25,500	
				CRAP METAL	_		
99	1,040						13.5
56	400						10.0
240	237				6,000 <b>4</b> ,200		10.0
250	195				4,200		
$\overline{Avg}$ .	468				5,100		12
Tot.	1,872				10,200		23.5

## Date: 10/18/88 SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

## (excluding coal) WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

Ref.	Berth Length (ft)	To Barge from		Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	(	orage Capy tons) en Covered	Acres
			SA	ND, GRAVEL AND STONE			
55	1,600	1,000					
67	1,280			200	40,0		
56 59	1,200 840	400		225	1,000,0 50,0		
200	800			223	30,0	ÖÖ	
72	675			150	350,0	00	
197	450				75,0		
115	400			100	200,0 4,5		
207 187	400 325				75,0		
6	250				1,5		
219	240	300					5.0
65	195	200			60,0		
190	120				60,0	00	
Avg.	627	475	<u> </u>	169	162,1	67	5
Tot.	8,775				1,946,0	00	5.0
237	8,000		MISCE	LLANEOUS BULK CARGO	150.0	00	
132	4,400			200	150,0	00	25.0
204	1,500				100,0	00	23.0
128	1,400	750			•	250,000	
32	1,100			150		60,000	
167 140	900 800			150 150	90,0	00	
200	800			130	30,0	00	
218	510			200	0,0		
17	500			200	130,0	00 30,400	
3 63	500			450			
211	500 <b>4</b> 50			<b>45</b> 0 120	60,0	32,500	
34	340			120	60,0	00	
233	300					100,000	
36	300			_	100,0		
148	300			300	100,0		
155 199	225 200				65,0		
186	200					5,000 6,000	
26	200	300		300	1,000,0	00 13,500	
Avg.	1,115	525		230	182,5	00 57,489	25
Tot.	23,425	~~			1,825,0	00 517,400	25.0

SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)
WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

Loading rate (Bu/Hr) Unloading rate Total Storage Capy (Bu/Hr) Ref. Berth (tons)

No. Length To Barge from From Barge to

(ft) Storage Truck Rail Storage Truck Rail Open Covered Acres

ALL FACILITIES

229 157,550 69,870 13.4 Avg. 782 683

3,781,200 1607000 53.5 Tot. 45,363

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

WATERWAY: MISSOURI RIVER

		Loading rate		Unloadin	g rate			
Ref.	Berth	(Bu/Hr)		(Bu/H	r)	Total St	orage Capy	
No.	Length	• • •		From Bar	ge to		tons)	
	(ft)	Storage Truck	Rail		Ťruck Rail		Covered	Acres
						<del></del>		
		FERT	ILIZER/	FERTILIZE	R COMPONEN	r <u>s</u>		
51	1,200			150			60,000	
75	590			150			10,000	
93	400			200			33,000	
86	360			85			25,000	
19	300						11,000	
92	235			100			49,200	
69	195						10,000	
32	180							
90	180							
63	36				100			
Avg.	368			137	100		28,314	· · · · · · · · · · · · · · · · · · ·
rot.	3,676						198,200	ı
			SAND,	STONE AND	GRAVEL	_		
3	800			300		30,0	00	
6	500					80,0		
1	475			200		200,0		
7	250			200		20,0		
1.3	200			200		15,0		
5	200					80,0		
2	200			250		30,0		
9	195			150		15,0		
18	195			200		65,0		
15	175			600		80,0		
12	175			200		15,0		
20	175			200		_5,0	30,000	)
39	150						100,000	
16	150			200			20,000	
68	100						65,000	
31	100						20,000	
24	100						15,000	
30	80						65,000	
21	15			200			31,000	
Avg.	223			245		57,2	273 43,250	)
rot.	4,235					630,0	00 346,000	)

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

WATERWAY: MISSOURI RIVER

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		Unloadir (Bu/F From Bar Storage	ir)	Total Store (tor Open (		Acres
				CEMENT				
34	400	200					57,400	
14	325			50			800	
94	300			170			80,000	
Avg.	342	200		110			46,067	
Tot.	1,025						138,200	
			MISCEL	Laneous Bi	JLK CARGO	_		
103	1,109	400					107,400	
100		400		200			130,000	
-66	697						200	
52	600							
38	480							5.0
41	400			350			125,000	
101	348	300					10,000	
14	325			50			4,000	
40	300	200					3,000	
19	300						15,000	
35	195						20,000	
99	195						50,000	
89	150	100						
Avg.	461	300 100		200	<del></del>		46,460	5
Tot.	5,999						464,600	9.0
			<u> </u>	LL FACILI	<u> Firs</u>			
Avg.	332	275 100		200	100	57,273	40,964	4.5
Tot.	14, 935					630,000	1147000	9.0

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: MONONGAHELA RIVER

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge fro Storage Truc	om	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storag (tons Open Co		
				CEMENT	_		
154	225					5,800	
Avg.	225					5,800	
Tot.	225					5,800	
				FERTILIZER			
158 159 160	625 525 170	1,800				4,200	
Avg.	440	1,800	<del></del>			4,200	
Tot.	1,320					4,200	
				ND, GRAVEL AND STONE			
63 119 74 83 108	950 400 350 350 200	100			700 4,000 1,400 5,500 600		
97	180	80	**************		152,300		
Avg. Tot.	405 2,430	73			27,417 164,500		
		_		SCRAP METAL	<del>_</del>		
18 <b>4</b> 179					1,500,000		3.0
204 198	450 380				150,000 150,000		6.0
98 99	370 300						16.0 3.5
Avg.	568	· · · · · · · · · · · · · · · · · · ·			600,000		7
Tot.	3,410				1,800,000		28.5

### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: MONONGAHELA RIVER

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Stor. (to: Open		Acres
			MISCE	LLANEOUS BULK CARGO	<del></del> -		
206	1,350	200			9,000		10.0
157	1,050				·		
61	600	250				1,600	
106	600					•	300.0
85	525						20.0
101	390				5,000		7.0
87	375						10.0
116	350						6.0
182	350						4.0
183	350	150					12.0
196	250				25,000		
199	200					30,000	
133	175				20,000		
155	175						1.7
Avg.	481	200			14,750	15,800	41
Tot.	6,740				59,000	31,600	370.7
			<u>A1</u>	LL FACILITIES			
Avg.	471	374			155,654	10,400	30.7
Tot.	14,125				2,023,500	41,600	399.2

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding cost)

(excluding coal)
WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

Ref.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck		(To	ing rate ns/Hr) arge to e Truck Rail	Total Stor (to Open	rage Capy ons) Covered	
				CEMEN	r	_		
236	1,500			200			65,000	
130	325			300			12,000	
253	260	300					62,000	
120	205			100			600	
98 26	200			200			4,500	
26	160			200			4,200	
Avg.	442	300		200	<u> </u>		24,717	
Tot.	2,650						148,300	
		FERT	ILIZER/	FERTILI:	ER COMPONENT	19		
31	1,000			350			20,000	
136	800			350			60,000	
60	800	80					16,500	
207	300			400			60,000	
153	300			250			88,000	
180	150			125			15,000	
Avg.	558	80		295		<del></del>	43,250	
Tot.	3,350		<b></b>				259,500	
			MISC	Ellaneou	S ORES			
214	2,640			300			17,000	
188	1,960			190			65,000	
112	1,400			170			29,600	
48	1,190						,	
11	1,050			200				3.0
32 120	825 800	500				450 000		7.0
116	780	500		250		150,000		
186	650			300			4,000	3.0
52	380		250	300				3.0
176	380					24,000		
275	200			100		10,000		2.0
230	200	500						
232 114	200 1 <b>95</b>	100						
233	150				100	FO 000		
225	100			400		50,000		
Avg.	771	500 300	250	239	100	58,500	28,900	
Tot.	13,100						115,600	15.0

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal) WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

Ref.	Berth Length (ft)	Loading rate (Tons/Hr) To Barge from Storage Truck	Rail	From Ba	s/Hr)	Total Store (to		Acres
-			SAND.	STONE AN	D GRAVEL	_	<u> </u>	
129	5,800			200			21,000	
121	-,	1,500		200		67,300	11,000	
7	•	-,000		1,000		0.,000	80,500	
155	•			1,500		200,000	•	
174	1,600	400				1,000,000		
33	•	1,400				400,000		
236				1,500			65,000	
158	1,400	1,500				200,000		
166		800		1 000		100,000	24 000	
86 4	•			1,000 250			24,000	12.0
238	1,225	900		250		500,000		12.0
208	1,000	400				100,000		
167	1,000	150				75,000		
40		1,000					62,000	
41	1,000	·		150		50,000		
229		3,000				115,000		
51	_,			500		100,000		
246	_	500				20,000		
13	890			250		50,000		
13		F00		600	0.00	13,100		
76 67	-	500		400	250	100,000		
1	850	450		400		150,000 200,000		
253		450		300		200,000	100,000	
15				300	250		200,000	9.0
119				500		300,000		• • • •
197	650			250		40,000		
117	600					•		12.0
131	600					600,000		
237	600			200		50,000		
169		150						2.0
135 224				250 500		20,000 500,000		
18	520			200		500,000		
149				250		60,225	1,550	
118	470			475		180,000	-, -, -	
194	439			500		100,000		
205	430			150		100,000		
58	400			100		750		
121	390			200				2.0
116		375				25,000		
37	350					3,000		
143	340			300		60,000		10.0
256 269				160		9 000	80	10.0
209 5				100 250		8,000		
202				200		100,000		
	500			-00		200,000		

(Continued on following page)

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)
WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

Ref.	Berth Length	Loading rate (Tons/Hr) To Barge from			ng rate s/Hr) rge to	Total Store		
	(ft)	Storage Truck	Rail	Storage	Truck Rail	Open	Covered	Acres
33	300	75				1,400		<del></del>
56	275			200		•	4,800	
150	250			250		1,000,000	·	
268	240			100		8,000		
151	200			150		15,000		
105	200		110			10,000		
106	200		110			8,000		
186	200			300		115,000		
63	200			200		90,000		
150	200			600		100,000		
113	200			500		130,000		
231	200	500				•		
225	200	• • • •		500		20,000		
24	195			150		,	1,100	
173	195	1,300					•	
114	195	500				150,000		•
249	175			300		,		5.0
218	175			150		20,000		
115	175			125		30,000		
109	175			250		10,000		
106	175			250		10,000		
180	150			100		7,000		
185	150			150		.,	1,800	
159	150						_,	. 5
134	135			300		200,000		
96	110				500	50,000		
177	100			250		10,000		
227	100			40		-0,000	2,700	
227	100			500		20,000	_,	
204	100					20,000		1.0
61	100			400		25,000		_,,
172	100	1,100		•••		1,000,000		
190	100	_,		500		, 50,000		
95	100			500		50,000		
Avg.	642	835 767	110	358	333	148,250	30,378	6
Tot.	52,605					8,746,775	364.530	53.5
	52,605					8,746,775	364,530	53.5 
			<u>-</u>	SALT				
153	300	250					8,000	2.0
Āvg.	300	250				<del></del>	8,000	2
Tot.	300						8,000	2.0

# SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

126 273 198 49	(ft) 525	Storage Tru	ck Rai	1 Storag	· m · · · · · · · · · · · · · ·				
273 198	525	_			e IIuck	Rail	Open	Covered	Acres
273 198	525			SCRAP ME	TAL		_		
198									13.0
	525								5.0
40	200	50					3,000		
49	175						40,000	)	
Avg.	356	50	<del></del>				21,500	·	\$
Tot.	1,425						43,000	)	18.0
			MTSCI	LLANEOUS	BIII.K CA	 RGO			
					<u> </u>		-		
259	1,200						20		6.0
140	1,160						10,000		
177	1,000			300	050		10 000		100.0
59	950	500		200	250		10,000	3,000	15.0
234 178	900 800			200 125				3,000	8.0
15	750			125					2.5
99	745				550				
30	700			175	334				8.0
17	700								8.0
139	695			400			125,000		
184	650			150			3,000		
89	585				250	250		4,200	5.0
263	550								6.0
39	525			150			250,000		
139	500				150				
174	400	1,000					300,000		
146	400		40	10	150			40 000	5.0
164 149	395 390	50	10		150			40,000	7.0
93	300	50	,,,					12,000	100.0
153	300			250			1,000,000		100.0
98	250	400		250			1,000,000		25.0
228	200			150					
148	200			500					25.0
127	195	200		200					35.0
171	195				150			40,000	
88	195			250				10,000	
195	175								2.0
146	135	050						104	
115	120	250		105				10 000	
169 229	120 115			125 150			50,000	10,000	8.0
140	100			700			30,000		10.0
Avg.	488	470 50	0 40	0 255	236	250	194,224	14,913	21
Tot. 1	6.595						1,748,020	119.304	375.5

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

(excluding coal)
WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

Loading rate (Tons/Hr) Unloading rate (Tons/Hr) Ref. Berth Total Storage Capy No. Length To Barge from From Barge to (tons)

(ft) Storage Truck Rail Storage Truck Rail Open Covered Acres

ALL FACILITIES

600 657 567 218 316 250 250 145,565 27,439 13.6 Avg.

Tot. 90,025 10,771,795 1015234 464.0

Date: 10/03/88

#### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES

## (excluding coal) WATERWAY: TENNESSEE-TOMBIGEE WATERWAY

Ref. No.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck	Rail	Unloading rate (Bu/Hr) From Barge to Storage Truck Rail	Total Storage Capy (tons) Open Covered	Acres
		FERT	ILIZER	FERTILIZER COMPONENT	28	
5	1,100					
16	210			250		
14	200			250		
Avg.	503			250		
Tot.	1,510					
			SAND.	STONE AND GRAVEL		
					<del></del>	
19		150		252		
16 14				250 250		
14	200			230		
Avg.	270	150		250		
Tot.	810					
			MISCELI	LANEOUS BULK CARGO		
20	7,800					
6	1,000					
3 9	1,000 950					2.0
8	866					
18	670					
2	414					4.0
17	400					
11	200					
Āvg.	1,478					3
Tot.	13,300					6.0
			<u>I.</u>	LL FACILITIES		
Avg.	1,041	150		250		3.0
Tot.	15,620					6.0

Open Covered Acres

### SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: TENNESSEE RIVER

Loading rate (Bu/Hr) Unloading rate

Ref. Berth Total Storage Capy (Bu/Hr) No. Length To Barge from From Barge to

(ft) Storage Truck Rail Storage Truck Rail (tons)

ALL FACILITIES

Avg. 499 750 175 1,050 268 208 549,461 10,364 7.6

Tot. 23,931 12,637,600 93,280 76.2

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: TENNESSEE RIVER

Ref.	Berth	Loading rate (Bu/Hr) To Barge from		Unloadi (Bu/ From Ba		Total	Storage (tons)	Сару
_	(ft)	Storage Truck			Truck Rail	0pen	Covered	Acres
			SAL	D. GRAVE	L AND STONE			
39	1,345	250			175	6,000,000		
140	880			200		10,000		
36	770	100		250				
104	600			125		15,000		
35	600	100				6,000,000		
149	595	125		200		100,000		
58	300			150				8.0
17	195				175	10,000		
181	195							
127	160					2,000		
57	135			250				8.6
72	70			100		50,000		
Avg.	487	144		182	175	1,523,375		
Tot.	5,845					12,187,000		16.0
			MISCEL	LANEOUS	BULK CARGO			
180	1,850		600					30.0
95	1,800							7.0
139	1,200	1,000				35,000		
186	1,063			300	300	20,000		
70	700		1,500					
10	700	500				5,000	6,000	
185	650					20,000		
136	560	300						1.4
87	530							1.3
69	500					9,000	11,500	
69	500						9,500	
142	490					15,000		
44	480							
71	400							7.0
52	400				175			
134	360							
155	300							
52	300				200			8.0
13	175			300		120,000	9,000	
184	150					4,000		
56	135			200				4.0
154	125			1,500		10,000		
lvg.	608	750 300	1,050	575	225	26,444	9,000	
	13,368					238,000	36,000	58.7

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal) WATERWAY: TENNESSEE RIVER

Ref.	Berth Length (ft)	Loading rate (Bu/Hr) To Barge from Storage Truck		(Bu/ From Ba			l Storage (tons) Covered	
				CEMENT				
141	_			200			6,000	
68 9				70 200			5,280 12,000	
Avg.	291			157		·	7,760	
Tot.	873						23,280	
				<u> FERTILIZE</u>	<u>R</u>			
43	520			125	150	30,000		
97 13	195 175			300	150		9,000	
Ãνÿ.	297			213	150	30,000	9,000	
Tot.	890					30,000	9,000	
			MISC	ELLANEOU	S ORES	<del></del>		
47 125	380 310			150 300		45,000	25,000	
28	280				400			
172	195				150	100,000		
Avg.	291			225	275	72,500	25,000	
Tot.	1,165					145,000	25,000	
				SALT				
34	700			175		12,600		
78	41.5			1/3	150	20,000		
Avg.	558			175	150	16,300		
Tot.	1,115					32,600		
			s	CRAP META	L			
89	480		-					1.5
147	195					5,000		4.5
Avg.	338					5,000		2
Tot.	675					5,000		1.5

1-1-1

Date: 9/02/88

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

#### WATERWAY: OUACHITA RIVER

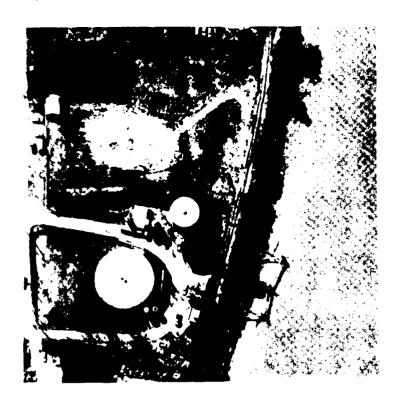
Ref. No.		Loading rate (Tons/Hr) To Barge from		Unloading rate (Tons/Hr) From Barge to		orage Capy	
	(ft)	Storage Truck	Rail	Storage Truck Rail	Open	Covered	Acres
		MIS	SCELLA	NEOUS (UNSPECIFIED)			
18	250					30 000	
1	200					39,000 5,500	
-						3,300	
Avg.	225					22,250	
Tot.	450					44 500	
						44,500	
			<u>ai</u>	L FACILITIES			
Avg.	225					22,250	
Tot.	450					44,500	

Date: 9/02/88

## SUMMARY OF DRY BULK-HANDLING BARGE FACILITIES (excluding coal)

WATERWAY: WHITE RIVER

Ref. No.	Berth Length	Loading rate (Tons/Hr) To Barge from		Unloading rate (Tons/Hr) From Barge to	Total Stora		
	(ft)	Storage Truck	Rail	Storage Truck Rail	Open (	Covered	Acres
		FERT	'ILIZ <b>E</b> R	/FERTILIZER COMPONENT	<u></u>		
7	200			100		20,000	
4	130			100		4,000	
Avg.	165			100		12,000	
Tot.	330					24,000	
			SA	ND, GRAVEL AND STONE			
13	160				150,000		
Āvg.	160				150,000	<del></del>	<del></del>
Tot.	160				150,000	- <b></b>	
			¥	LL FACILITIES			
Avg.	163			100	150,000	12,000	
Tot.	490				150,000	24,000	



LIQUID
BULK
HANDLING
TERMINALS

This category is further subdivided into 8 subcategories, each being arranged according to descending tankage: Ammonia (including anhydrous and aqua ammonia); Alcohol; Chemicals/Petrochemicals; Fertilizer; Molasses; Sludge; Sulphur; Vegetable/Animal Oils; and Miscellaneous (unspecified, liquid salt, sugar, tung oil, creosote, etc.).

Tankages of miscellaneous items are given in gallons and those of specific items in tons, thus rendering a grand summary of all liquid bulk facilities meaningless.

# SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES Date: 9/30/88

WATERWAY: ALABAMA RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	CHEMICA	LS/PETROCHE	MICALS	
114	650	R	999,600	GALLONS
AVERAGE:	650		999,600	GALLONS
LATOT	650		999,600	GALLONS

## SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES Date: 9/30/88

#### WATERWAY: ALLEGHENY RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	CHEMICAL	LS/PETROCH	EMICALS	
228	350	R/S	4,500,300	GALLONS
214	200	R	3,507,000	GALLONS
232	300	R	275,100	GALLONS
AVERAGE:	283		2,760,800	GALLONS
TOTAL	850		8,282,400	GALLONS
	VEGET	ABLE/ANIMA	L OILS	
245	175	S	2,900	TONS
AVERAGE:	175		2,900	TONS
TOTAL	175		2,900	TONS
	· · · · · · · · · · · · · · · · · · ·			

Date: 10/04/88

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: APALACHICOLA, CHATTAHOOCHEE, AND FLINT RIVERS

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		AMMONIA		
10	900	R	50,000	TONS
AVERAGE:	900		50,000	TONS
TOTAL	900		50,000	TONS
	CHEMIC	ALS/PETROCH	EMICALS	<del></del>
13	40	R	9, 996, 000	GALLONS
12	150	R	6,132,000	GALLONS
24	402	R	4,998,000	GALLONS
10	900	R	3,250,800	GALLONS
18	516	R	1,499,400	GALLONS
AVERAGE:	402		5,175,240	GALLONS
TOTAL	2,008		25,876,200	GALLONS
		FERTILIZER		
19	354	s	10,995	TONS
10	900	R/S	6,000	TONS
AVERAGE:	627		8,498	TONS
TOTAL	1,254		16,995	TONS
		MOLASSES		
23	586	R	499,800	GALLONS
AVERAGE:	586		499,800	GALLONS
TOTAL	586		499,800	GALLONS

#### ALL FACILITIES

AVERAGE:

528

TOTAL: 4,748

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: ARKANSAS AND VERDIGRIS RIVERS (MCCLELLAN-KERR - ARKANSAS

RIVER NAVIGATION SYSTEM)

REF. NO.	BERTHING LENGTH (FT)		'ANKAGE	UNITS
		FERTILIZER		
41	200		10,400	TONS
22	250		5,500	TONS
14	540		4,000	tons
75	700		920	TONS
80	340			
AVERAGE:	406		5,205	
TOTAL	2,030		20,820	
		MOLASSES		
33	830		6,500	TONS
75	700		1,500	TONS
AVERAGE:	765		4,000	TONS
TOTAL	1,530		8,000	Tons
	MISC	ELLANEOUS (UNSPI	ECIFIED)	
21	300	9	100,000	GALLONS
41	200		050,000	GALLONS
AVERAGE:	250	1,	575,000	GALLONS
TOTAL	500	3,	150,000	GALLONS

#### ALL FACILITIES

AVERAGE:

451

TOTAL:

4,060

Date: 10/03/88

### SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: BLACK WARRIOR-TOMBIGBEE-MOBILE RIVERS (BLACK WARRIOR RIVER SYSTEM)

 REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	CHEMICAL	LS/PETROCE	IEMICALS	
69	330	R	5,544,000	GALLONS
60	700	R	3,100,000	GALLONS
67	200	R	1,995,000	GALLONS
59	200	R	1,505,000	GALLONS
44	400	R/S	1,250,000	GALLONS
46	200	S	570,000	GALLONS
26	400	S	420,000	GALLONS
28	200	R	280,000	GALLONS
36	200	S	191,800	GALLONS
 AVERAGE:	314		1,650,644	GALLONS
TOTAL	2,830		14,855,800	GALLONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: COLUMBIA-SNAKE RIVER SYSTEM (ABOVE THE DALLES - MILE 191.5)

BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
-	AMMONIA		
480	R/S	51,600	TONS
110	S	3,900	TONS
295		27,750	TONS
590		55,500	Tons
	FERTILIZER		
135	R/S	78,800	TONS
110	S	33,000	TONS
300	R/S		Tons
		4,100	tons
375	R	2,800	TONS
225		25,780	TONS
1,124		128,900	TONS
	MOLASSES		
135	R/S	4,000	TONS
135		4,000	TONS
135		4,000	TONS
	LENGTH (FT)  480 110  295 590  135 110 300 204 375  225 1,124	### AMMONIA  ### AMMONIA  ### ### ### ### ### ### ### ### ### #	LENGTH   AND/OR   SHIPMENT

#### ALL FACILITIES

AVERAGE:

231

TOTAL:

1,849

Date: 9/29/88

### SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: CUMBERLAND RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	CHEMICA	LS/PETROCH	IEMICALS	
29	330	R	15,000,000	GALLONS
17 16	300 550	R S	1,147,000 14,300	Gallons Gallons
AVERAGE:	393		5,387,100	GALLONS
TOTAL	1,180		16,161,300	GALLONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: ILLINOIS WATERWAY (INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	A	LCOHOL		
125 128	400 200	S R	4,000,000 3,500,000	Gallons Gallons
AVERAGE:	300		3,750,000	GALLONS
TOTAL	600		7,500,000	GALLONS
	A	MMONIA		
30	400	R	60,000	TONS
96	440	R	42,500	TONS
137	600	R	40,000	TONS
58	470	R	30,000	TONS
83	540	R	25,000	TONS
119	200	R	20,000	TONS
7	320	R	20,000	TONS
81	265	R	20,000	TONS
114	400	R	20,000	TONS
94	1,070	S	10,000	Tons
AVERAGE:	471		28,750	TONS
TOTAL	4,705		287,500	TONS

# Date: 10/13/88 SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: ILLINOIS WATERWAY (INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO)

REF.	BERTHING LENGTH (FT)	G RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	FI	ERTILIZER		
7	320	R	39,000	TONS
17	320	R	34,600	tons
150C	275	R	25,450	TONS
114	400	R	23,000	TONS
143	1,000	R	23,000	TONS
99	120	R/S	22,000	TONS
29	200	R	21,000	TONS
29	200	R	21,000	TONS
108	285	R	20,900	TONS
128	200	R	16,500	TONS
92	875	R	16,500	TONS
96	440	R 	16,000	Tons
18	250	R	15,000	TONS
85	200	R	11,000	TONS
86	400	R	11,000	TONS
129	315	R	5,190	TONS
147C	600	S	1,700	TONS
AVERAGE:	376		18,991	TONS
TOTAL	6,400		322,840	TONS
		MOLASSES		
195C	365	R	22,150	TONS
168C	1,000	R	7,075	TONS
111	120	R	3,600	TONS
150C	275	x	1,610	TON
AVERAGE:	440	·	8,609	TON
TOTAL	1,760		34,435	TON
		SLUDGE		
139	856	x	1,000,000	GALLONS
AVERAGE:	856		1,000,000	GALLONS
TOTAL	856		1,000,000	GALLONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: ILLINOIS WATERWAY (INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO)

 REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	CHEMICA	LS/PETROCH	EMICALS	
83	540	R	8,800,000	GALLONS
65	750	R	8,000,000	GALLONS
83C	920	R	7,282,640	GALLONS
133	200	R	7,000,000	GALLONS
69	567	R	6,720,000	GALLONS
97C	975	R	5,700,000	GALLONS
110	175	R	5,240,000	GALLONS
8 6C	195	R	5,050,000	GALLONS
70	260	R	5,000,000	GALLONS
86	400	S	4,750,000	GALLONS
100C	2,740	R/S	4,000,000	GALLONS
87C	242	R	3,818,000	GALLONS
98	160	R	3,785,000	GALLONS
72	125	R	3,700,000	GALLONS
98C	600	R	3,000,000	GALLONS
193C	320	R	2,288,000	GALLONS
67	195	R	2,100,000	GALLONS
151C	150	R/S	1,950,000	GALLONS
202C	150	R	1,895,000	GALLONS
73	880	R	1,690,000	GALLONS
63	340	x	1,500,000	GALLONS
62C	810	R/S	1,000,000	GALLONS
8	140	X	1,000,000	GALLONS
94	1,070	S	813,000	GALLONS
71	1,270	R	630,000	GALLONS
143	1,000	R	500,000	GALLONS
24C	680	R	390,000	GALLONS
147C	600	S	44,200	GALLONS
 AVERAGE:	588		3,487,351	GALLONS

TOTAL 16,454

97,645,840 GALLONS

#### SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: ILLINOIS WATERWAY (INCLUDING BARGE FACILITIES AT THE PORT OF CHICAGO)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		SULPHUR		
94	1,070	S	8,000	TONS
AVERAGE:	1,070		8,000	TONS
TOTAL	1,070		8,000	TONS
	VEGETAB	LE/ANIMAL	oils	
1660	690	ъ	96 130	MONG
166C 68	195	R R	86,130 7,500	TONS TONS
25C	182	R	4,350	TONS
19C	297	R	2,900	TONS
5	400	R	2,175	TONS
18	250	S	1,800	TONS
AVERAGE:	336		17,476	TONS
TOTAL	2,014		104,855	TONS
	MISCELLAN	EOUS (UNSP	ECIFIED)	
75C	760	R/S	43,840,000	GALLONS
164C	1,220	R/S	25, 628, 400	GALLONS
92C	650	R/S	5,000,000	GALLONS
800	850	R/S	3,000,000	GALLONS
76C	285	X	840,000	GALLONS
_24	360	S	800,000	<b>GALLONS</b>
59C	920	Ř	500,000	GALLONS
AVERAGE:	721		11,372,629	GALLONS
TOTAL	5,045		79,608,400	GALLONS
		<del></del>		

#### ALL FACILITIES

AVERAGE:

512

TOTAL:

38,904

#### SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: KANAWHA RIVER

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		AMMONIA		
71	510	R	20,000	TONS
AVERAGE:	510		20,000	TONS
TOTAL	510		20,000	TONS
	CHEMICA	LS/PETROCH	EMICALS	
87	385	R/S	60,000,000	GALLONS
82	585	R	17,400,000	GALLONS
69	390	R	6,000,000	GALLONS
35	500	R/S	5,000,000	GALLONS
68	390	R/S	1,300,000	GALLONS
94	200	X	1,250,000	Gallons
96	390	R	1,000,000	GALLONS
93	500	R	470,000	GALLONS
32	400	S	390,000	GALLONS
33	195	s	130,000	GALLONS
AVERAGE:	394		9,294,000	GALLONS
TOTAL	3,935		92,940,000	GALLONS
	м	ISCELLANEOU		<del></del>
31	400	R	4,000,000	GALLONS
AVERAGE:	400		4,000,000	GALLONS
TOTAL	400		4,000,000	GALLONS

#### ALL FACILITIES

AVERAGE:

404

TOTAL: 4,845

#### SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

#### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE TO CAIRO)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		AMMONIA		
105M	1,080	S	45,000	TONS
53 <b>M</b>	450	R	4,300	TONS
AVERAGE:	765		24,650	TONS
TOTAL	1,530		49,300	TONS
	СНЕМІ	CALS/PETRO	CHEMICALS	
E 214	450	R	1,750,000	GALLONS
53M 114M	250	R	1,289,400	GALLONS
AVERAGE:	350		1,519,700	GALLONS
TOTAL	700		3,039,400	GALLONS
· · · · · · · · · · · · · · · · · · ·		FERTILIZE	<u> </u>	
90N	300	R	29,150	TONS
96M	275	R	28, 900	TONS
57N	250	S	27,500	TONS
106M	290	R/S	11,000	TONS
100M	195	R	8,500	TONS
58N	180	R	5,000	TONS
73N	200	S	5,000	TONS
118M	358	S		TONS
AVERAGE:	256		16,436	TONS
TOTAL	2,048		115,050	TONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: LOWER MISSISSIPPI RIVER (BATON ROUGE TO CAIRO)

BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
VEGETA	ABLE/ANIMAL	OILS	
240	S	4,500	TONS
540	S	3,800	TONS TONS
410		4,267	TONS
1,230		12,800	TONS
MISCEL	LANEOUS (UN	SPECIFIED)	
700 195	R/S R/S	<b>4</b> 5,500 11,000	tons tons
448		28,250	TONS
895		56,500	TONS
	LENGTH (FT)  VEGETA  240 450 540  410  1,230  MISCELL  700 195	VEGETABLE/ANIMAL  240 S 450 S 540 S  410  1,230  MISCELLANEOUS (UN)  700 R/S 195 R/S	LENGTH   AND/OR   TANKAGE

#### ALL FACILITIES

AVERAGE:

377

TOTAL: 6,403

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO TO MISSOURI RIVER)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
· <del>-</del>	<del></del>	ALCOHOL		
132	195	R	12,000	GALLONS
AVERAGE:	195		12,000	GALLONS
TOTAL	195		12,000	GALLONS
		AM	MONIA	
20	360	R/S	31,000	TONS
150	450	R/S	30,000	TONS
AVERAGE:	405		30,500	TONS
TOTAL	810		61,000	TONS
	CHEMI	CALS/PETRO	CHEMICALS	
119	195	R/S	6,000,000	GALLONS
132	195	R	5,952,000	GALLONS
23	195	R/S	4,970,000	GALLONS
102	140	R	2,800,000	GALLONS
147	170	S	1,632,200	GALLONS
88 35	875 <b>4</b> 35	R R/S	630,000 600,000	Gallons Gallons
AVERAGE:	315		3,226,314	GALLONS
TOTAL	2,205		22,584,200	GALLONS
		FERTILIZI	ER	
10	700	S	45,300	TONS
150	450	R/S	20,000	TONS
30	400	R	16,500	TONS
35	435	R/S	16,500	TONS
158	195	R	10,100	TONS
AVERAGE:	436		21,680	TONS
TOTAL	2,180		108,400	TONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

## WATERWAY: MIDDLE MISSISSIPPI RIVER (CAIRO TO MISSOURI RIVER)

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		MOLASSES		
107	195	R	17,000	TONS
AVERAGE:	195		17,000	TONS
TOTAL	195		17,000	TONS
	VEGET	ABLE/ANIMA	LOILS	
35	435	R/S	48,500	TONS
AVERAGE:	435		48,500	TONS
TOTAL	435		48,500	TONS
	MISCELL	ANEOUS (UN	SPECIFIED)	
116	390	R/S	1,055,000	GALLONS
AVERAGE:	390		1,055,000	GALLONS
TOTAL	390		1,055,000	GALLONS

### ALL FACILITIES

AVERAGE:

356

TOTAL: 6,410

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

Date: 10/11/88

# WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		ALCOHOL		
214	635	s	1,500,000	GALLONS
70	200	R/S	1,341,000	GALLONS
138	600	R	1,200,000	GALLONS
AVERAGE:	478		1,347,000	GALLONS
TOTAL	1,435		4,041,000	GALLONS
		AMMONIA		
232	2,000	S	60,000	TONS
136	585	R	60,000	TONS
20	400	R/S	60,000	TONS
25	225	S	40,000	TONS
176	500	R	30,000	TONS
10	225	R/S	30,000	TONS
246	450	R/S	30,000	TONS
54	200	R/S	30,000	TONS
248	280	R	25,000	TONS
68	740	R/S	20,000	TONS
AVERAGE:	561		38,500	TONS
TOTAL	5,605		385,000	TONS
	CHEMIC	als/petroch	EMICALS	
184	220	R	2,703,600	GALLONS
210	195	R	2,000,000	GALLONS
220	180	R	1,500,000	GALLONS
248	280	R	1,400,000	GALLONS
222	200	R	1,200,000	GALLONS
127	225	R	1,040,000	GALLONS
AVERAGE:	217		1,640,600	GALLONS
TOTAL	1,300		9,843,600	GALLONS

# SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES Date: 10/11/88

# WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		FERTILIZER		
25	225	s	80,000	TONS
154	200	R	44,000	TONS
24	350	R/S	33,000	TONS
20	400	R/S	30,000	TONS
136	585	R	25,000	TONS
172	320	R	22,000	TONS
236	550	R	20,350	TONS
13	960	R	19,500	Tons
19	100	R	16,500	tons
224	130	S	11,000	TONS
51	60	R	11,000	TONS
207	400	R	11,000	TONS
68	740	R/S	4,675	TONS
173	390	R	3,619	TONS
179	450	S	3,300	TONS
17	500	R	3,000	TONS
160	195	R	2,365	TONS
AVERAGE:	386		20,018	TONS
TOTAL	6,555		340,309	TONS
		MOLASSES		<del></del>
173	390	R	47,016	TONS
68	195	R	41,139	TONS
70	200	R/S	31,253	TONS
19	100	R	29,385	TONS
218	510	R	20,000	TONS
210	195	R	17,631	TONS
AVERAGE:	265		31,071	TONS
TOTAL	1,590		186,424	TONS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: UPPER MISSISSIPPI RIVER (MISSOURI RIVER TO MINNEAPOLIS)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	VEGE:	TABLE/ANIMAL	OILS	
2	350	S	15,000	TONS
172	320	S	14,790	TONS
143	300	S	12,000	TONS
210	195	S	8,700	TONS
70	200	R/S	5,833	TONS
60	750	S	3,100	TONS
66	1,000	S	1,400	TONS
AVERAGE:	445		8, 689	TONS
TOTAL	3,115		60,823	Tons

### ALL FACILITIES

AVERAGE:

400

TOTAL: 19,600

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

Date: 10/11/88

### WATERWAY: MISSOURI RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		AINOMMA		
100	475	R	50,000	TONS
AVERAGE:	475		50,000	TONS
TOTAL	475		50,000	TONS
	CHEMICA	LS/PETROCH	EMICALS	-
42	600	R	6,132,500	GALLONS
84	300	R	3,000,000	GALLONS
AVERAGE:	450		4,566,250	GALLONS
TOTAL	900		9,132,500	GALLONS
		FERTILIZER		
60	275	R	73,000	TONS
91	175	R	52,060	TONS
79	130	R	31,200	Tons
81	550	S	27,500	tons
87	300	R	27,300	Tons
100	475	R	21,000	Tons
19	300	R/S	16,500	Tons
36	195	R	14,850	TONS
70	210	R	13,900	TONS
8	400	R	12,350	TONS
25 106	855 900	R	11,000	TONS
106 69	195	R R	11,000 9,600	TONS TONS
28	600	R	5,500	TONS
42	600	R	2,850	TONS
AVERAGE:	411		21,974	TONS
TOTAL	6,160		329,610	TONS

## SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: MISSOURI RIVER

REF. NO.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		MOLASSES		
106	900	R	25,000	TONS
83	260	R	25,000	TONS
57	400	R	19,000	TONS
19	300	R/S	8,800	TONS
AVERAGE:	465		19,450	TONS
TOTAL	1,860		77,800	TONS
	VEGET	ABLE/ANIMAL	OILS	
103	1,136	S	21,750	TONS
66	697	S	11,750	TONS
107	250	R/S	6,200	TONS
79	130	S	2,900	TONS
104	150	S	2,200	TONS
AVERAGE:	473		8,960	TONS
TOTAL	2,363		44,800	TONS

### ALL FACILITIES

AVERAGE: 435

TOTAL: 11,758

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

Date: 9/30/88

### WATERWAY: MONOGAHELA RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		AMMONIA		
81 175 103	700 390 295	S R R	20,000 20,000 1,300	Tons Tons
AVERAGE:	462		13,767	TONS
TOTAL	1,385		41,300	TONS
	CHEMICAL	S/PETROCHE	MICALS	
86 78 175 185 203	175 1,200 390 150	R/S R/S S R R	7,000,000 3,700,000 540,000 450,000 120,000	GALLONS GALLONS GALLONS GALLONS
AVERAGE:	413		2,362,000	GALLONS
TOTAL	2,065		11,810,000	GALLONS

### ALL FACILITIES

AVERAGE:

431

TOTAL: 3,450

# SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES Date: 10/14/88

### WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
		ALCOHOL		
100L	195	R	642,600	GALLONS
AVERAGE:	195		642,600	GALLONS
TOTAL	195		642,600	GALLONS
		AINOMMA		
60L	800	R	45,000	TONS
152C	200	R	20,000	TONS
221L	150	R	15,000	TONS
AVERAGE:	383		26,667	TONS
TOTAL	1,150		80,000	TONS

Date: 10/14/88 SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

REF.

BERTHING RECEIPT

NO.

LENGTH AND/OR

(FT) SHIPMENT

TANKAGE UNITS

	CHEMICALS/PETROCHEMICALS						
137H	150	R	14,070,000	GALLONS			
89C	450	R/S	12,409,091	Gallons			
128C	160	R	9,996,000	GALLONS			
9 <b>P</b>	160	R	9,100,000	Gallons			
49P	134	R	8,786,610	GALLONS			
55P	540	R/S	8,400,000	GALLONS			
55 <b>P</b>	540	R/S	8,400,000	GALLONS			
46P	290	R/S	7,500,000	GALLONS			
271P	270	S	7,140,000	GALLONS			
232H	100	R	6,426,000	GALLONS			
272P	300	R	6,300,000	GALLONS			
147C	195	R	5,800,200	GALLONS			
274P	440	R	4,620,000	GALLONS			
131C	175	R	3,150,000	GALLONS			
118H	240	R	3,150,000	GALLONS			
183H	120	R	3,150,000	GALLONS			
179H	160	R	2,940,000	GALLONS			
139C	500	R	2,310,000	GALLONS			
73C	210	R/S	2,289,000	GALLONS			
124L	180	R	2,268,000	Gallons			
19P	140	S	2,221,800	GALLONS			
145H	100	R/S	2,100,000	GALLONS			
8C	195	R	1,999,200	GALLONS			
21P	87	R	1,680,000	GALLONS			
8 6C	175	R	1,575,000	GALLONS			
18H	380	R	1,500,000	GALLONS			
78C	110	R/S	1,260,000	GALLONS			
46C	110	R/S	1,131,000	GALLONS			
170H	1,040	R	1,020,600	GALLONS			
136H	140	R	999,600	GALLONS			
127C	175	R	978,600	GALLONS			
141C	100	R	945,000	GALLONS			
90L	195	R	600,600	GALLONS			
128H	125	R	499,800	GALLONS			
140H	40	R	499,800	GALLONS			
157C	120	S	480,000	GALLONS			
12P	440	S 7/0	400,000	GALLONS			
50P	129	R/S	252,000	GALLONS			
14P	525	R	240,000	Gallons			
132L	600	S					
139н	60	<b>S</b>					
AVERAGE:	251		3,809,946				

10-24

148,587,901

10,300

TOTAL

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

Date: 10/14/88

## WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

REF.	BERTHIN	G RECEIPT		
NO.	LENGTH	AND/OR	TANKAGE	UNITS
	(FT)	SHIPMENT		
		FERTILIZER		
221L	150	R	39 000	<b>5010</b>
181H	150	R	38,000 33,033	TONS
136C	800	R	30,250	Tons Tons
114C	175	R	27,489	TONS
147L	175	R	25,410	TONS
60L	800	R	18,000	TONS
152L	200	S	16,500	TONS
88L	195	R	13,190	TONS
138C	120	R	12,705	TONS
153L	300	R	8,246	TONS
207L	300	R	4,998	TONS
124L	180	R	4,620	TONS
AVERAGE:	295		19,370	TONS
TOTAL	3,545		232,441	TONS
		MOLASSES		
182H	400	R	7,014,000	GALLONS
107L	150	R	966,000	GALLONS
127C	175	R	873,563	GALLONS
AVERAGE:	242		2,951,188	GALLONS
TOTAL	725		8,853,563	GALLONS
	-	SULPHUR		
46C	110	R	1,300	TONS
AVERAGE:	110		1,300	TONS
TOTAL	110		1,300	TONS
	VEGET	ABLE/ANIMA	OILS	
137C	120	R		
AVERAGE:	120			<del>-</del>
TOTAL	120			

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: OHIO RIVER (PITTSBURGH TO CAIRO)

BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS
	MISCELLANI	EOUS	
170	R	60,060,000	GALLONS
220	R	20,580,000	GALLONS
375	R	16,800,000	GALLONS
120	R	13,440,000	GALLONS
200	S	5,000,000	GALLONS
300	R/S	4,498,200	GALLONS
390	R	3,599,400	Gallons
200	R	1,999,200	GALLONS
737	R	1,919,400	GALLONS
175	R	1,654,800	GALLONS
150	R	730,800	GALLONS
360	R	630,000	GALLONS
195	R	600,600	GALLONS
180	R	504,000	GALLONS
735	R	373,800	GALLONS
300		8,826,013	GALLONS
4,507		132,390,200	GALLONS
	LENGTH (FT)  170 220 375 120 200 300 390 200 737 175 150 360 195 180 735	MISCELLAN  170 R 220 R 375 R 120 R 200 S 300 R/S 390 R 200 R 737 R 175 R 150 R 360 R 195 R 180 R 735 R	TANKAGE

### ALL FACILITIES

AVERAGE:

268

TOTAL: 20,652

Date: 9/28/88

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

### WATERWAY: OUACHITA RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS					
AMMONIA									
14	400	S	75,000	TONS					
AVERAGE:	400		75,000	TONS					
TOTAL	400		75,000	TONS					
CHEMICALS/PETROCHEMICALS									
16	450	S	420,000	GALLONS					
AVERAGE:	450		420,000	GALLONS					
TOTAL	450		420,000	GALLONS					
VEGETABLE/ANIMAL OILS									
13	300	x	2,000	TONS					
AVERAGE:	300		2,000	TONS					
TOTAL	300		2,000	TONS					
				- <del></del>					

### ALL FACILITIES

AVERAGE:

383

TOTAL: 1,150

UNITS

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

WATERWAY: TENNESSEE RIVER

REF. BERTHING RECEIPT

NO. LENGTH AND/OR TANKAGE

SHIPMENT (FT)

VEGETABLE/ANIMAL OILS

575 14,500 TONS 99 11,100 TONS 159 1,100 R

838 AVERAGE:

TOTAL 1,675

MISCELLANEOUS

999,600 **GALLONS** 95 1,800 R S 940,000 **GALLONS** 530 87

AVERAGE: 1,165

> TOTAL 2,330

> > ALL FACILITIES

494 AVERAGE:

> TOTAL: 10,861

SUMMARY OF LIQUID BULK HANDLING BARGE FACILITIES

Date: 9/28/88

### WATERWAY: WHITE RIVER

REF.	BERTHING LENGTH (FT)	RECEIPT AND/OR SHIPMENT	TANKAGE	UNITS			
FERTILIZER							
7	200 130	R R	6,000 <b>4</b> ,500	TONS TONS			
AVERAGE:	165		5,250	TONS			
TOTAL	330		10.500	TONS			

### **OTHER COMMODITIES:**

Listed below are a number of commodity items not included in this report.

- 1. Forest products (lumber, logs, pulpwood, wood pulp, hog fuel, paper products).
- 2. General cargo (conventional and containerized).
- 3. Unitized cargo (steel, precast concrete, fabrications, plant equipment and machinery).
- 4. Building materials (brick, block, glass).
- 5. Seafood.
- 6. Refuse.

These commodity items, with the possible exception of forest products, altogether account for minimal inland waterway cargo tonnage. These items will be included in a future report.

### BIBLIOGRAPHY

### U.S. ARMY CORPS OF ENGINEERS

### PORT SERIES REPORTS

NO.	TITLE	DATE OF PUBLICATION
19	Panama City and Pensacola, FL; Pascagoula and Gulfport, MS; and Ports on the Apalachicola, Chattahoochee, and Flint Rivers	1986
33	Coos Bay, OR and Ports on Columbia-Snake River System (Astoria, The Dalles, Boardman, and Umatilla, OR; Longview, Kalama, Vancouver, Pasco/Kennewick, Wilma, and Clarkston, WA; and Lewiston, ID)	1986
46	Chicago, IL	1985
60	Pittsburgh, PA, and Ports on the Ohio, Monongahela, and Allegheny Rivers, PA	1982
61	Huntington, WV, Ports on Ohio River Miles 40-317, and Kanawha River, WV	1983
62	Cincinnati, OH, and Ports on Ohio River Miles 317-560	1983
63	Louisville, KY, Ports on Ohio River Miles 560-980, and Cumberland and Green Rivers	1984
64	Ports on Tennessee River, Tennessee-Tombigbee and Black Warrior-Tombigbee Waterways, and Alabama River	1986
65	Illinois Waterway, IL	1984
68	Ports on the Missouri, Arkansas, Verdigris, White, and Ouachita Rivers	1987
69	Minneapolis-St. Paul, MN, and Ports on Upper Mississippi River Miles 300-860 AOR	1985
70	St. Louis, MO, and Ports on Upper Mississippi River Miles 0-300 AOR	1982
71	Memphis, TN; Helena, AR; and Ports on Lower Mississippi River Miles 620-954 AHP	1983
72	Natchez, Vicksburg, and Greenville, MS, and Ports on Lower Mississippi River Miles 255-620 AHP	1982

